ment of a Gallo-Roman museum, to which Mortillet was attached and to which he devoted his energies until 1885, when he resigned in consequence of his election to the national legislature. He also took an active part in the proceedings of the Association Française pour l'Avancement des Sciences, the Société d'Anthropologie, and many congresses and meetings of anthropologists and archeologists. A memoir of his life, together with a bibliography prepared by his colleague Émile Cartailhac, is published in the September-October (1898) number of *L'Anthropologie*, Paris.

A. S. GATSCHET.

Korean Crossbow and Arrow-tube—The Koreans have a device for shooting short arrows with a bow, the draw of which is too long for the purpose. This device, hitherto undescribed, is called *saltong*, "arrow-tube," and consists of a tube of bamboo having a narrow strip removed throughout its length. One end of the tube is fastened to the wrist of the archer, the other end rests on the hand grasping the bow; the arrow is set on the bowstring with the head slanting into the slot, and tube and arrow are drawn back together. On the release of the string the arrow is discharged through the tube, and simultaneously the tube, having been drawn back past its support, falls down. There is a suggestion here as to the origin of the crossbow. The latter weapon is known to the Koreans, who call it *te-bak-sal*. It is a rapid-fire weapon, shooting four or five arrows in succession like the Chinese crossbow. The principal use of the crossbow was in war, although sometimes it was employed by hunters. The arrows were dipped in vegetal poison, the plant from which it was derived not being known to my informant, Mr Kiu Beung Surh.

WALTER HOUGH.

Among the Murray Islanders of Torres straits the only native numerals are *netat* (one) and *neis* (two). Any higher numbers would be described either by reduplication, *e.g.*, *neis netat*, lit. two-one for three; *neis-i-neis*, lit. two-two for four, etc., or by reference to some part of the body. By the latter method a total of thirty-one could be counted. The counting commenced at the little finger of the left hand, thence counting the digits, wrist, elbow, armpit, shoulder, hollow above the clavicle, thorax, and thence in reverse order down the right arm, ending with the little finger of the right hand. This gives twenty-one. The toes are then resorted to, and these give ten more. Beyond this number the term *gaire* (many) would be used; and if it was necessary to be exact, *kupe*, or tallies, would be used.—Hunt in *Jour. Anthrop. Inst.*, N. S., vol. 1, p. 13, London, 1898.

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HAWAIIAN GAMES

BY STEWART CULIN

INTRODUCTION

The new materials of this paper were collected from four Hawaiian sailors, from Honolulu, named Aka (Kamehameha), Daviese Kahimoku, Welakahao, and Hale Paka (Harry Park), and verified by means of Andrews' *Hawaiian Dictionary*.[1] These have been supplemented by information from other sources[2] and by a few notes on similar games in other islands,[3] the object

[1] Honolulu, 1865.

[2] Peter Corney, *Voyages in the Northern Pacific* (1813–1818), Honolulu, 1896. William Ellis, *Polynesian Researches*, London, 1853. Charles Wilkes, U. S. N., *Narrative of the U. S. Exploring Expedition during the Years 1833–1842*, Philadelphia, 1845. H. Carrington Bolton, *Some Hawaiian Pastimes* (*Journal of American Folk-lore*, vol. IV, No. 21). W. D. Alexander, *A Brief History of the Hawaiian People*, N. Y., 1871. Wm. T. Brigham, *Preliminary Catalogue of the Bernice Pauahi Bishop Museum*, Honolulu, 1892.

[3] Rev. John B. Stair, *Old Samoa, or Flotsam and Jetsam from the Pacific Ocean*, London, 1897. Thomas Williams and James Calvert, *Fiji and the Fijians*, N. Y., 1859. R. Taylor, *Te ika a maui, or New Zealand and its Inhabitants*, London, 1855. Ernest Dieffenbach, *Travels in New Zealand*, London, 1843. R. H. Codrington, *The Melanesians, Studies in their Anthropology and Folk-lore*, Oxford, 1891. In addition the writer desires to acknowledge his indebtedness to that most suggestive paper by Dr E. B. Tylor: "*Remarks on the Geographical Distribution of Games*," in the *Journal of the Anthropological Institute*, vol. IX, 1879, and to the chapters on "Toys and Games" in Prof. A. C. Haddon's valuable work, *The Study of Man*, 1898.

being to furnish a concise account of the games of Hawaii for comparative purposes.

Many of the ancient games and amusements of the Hawaiians have practically disappeared since the discovery of the islands by Captain Cook in 1778, but the people retain their pleasure-loving characteristics and assemble on their numerous holidays[1] to engage in wrestling, cock-fighting, and other sports. Live pigs, bread-fruit, bananas, and cocoanuts are wagered on these occasions. Alexander[2] states that the Hawaiians resorted to games chiefly for the purpose of betting, to which they were excessively addicted. Men and women of all ranks were eager to stake every article they possessed on their favorite players, and the games seldom ended without fierce brawls between the different parties. This custom of betting to the utmost extent in all games came in, according to Brigham,[3] in the half century preceding the reign of Kamehameha I, coincident with a general decline in the strict observance of religious rites. It was not common to all the islands. Ellis[4] says that the natives of Tahiti do not appear to have been gamblers, nor to have accompanied any of their sports with betting, but seem to have followed their games simply for amusement.

The writer has included in this survey all amusements except the dance. He will be greatly obliged for additions and corrections.[5]

[1] The principal holidays at present, according to my informants, are: March 17, birthday of Kamehameha II; June 11, birthday of Kamehameha I; November 16, birthday of Kalakaua; and New Year's day.

[2] Op. cit., p. 88.

[3] *Preliminary Catalogue*, part II, p. 54.

[4] Op. cit., p. 204.

[5] I have refrained from expressing any conclusions based on the material here presented. In general the games described may be referred to the continent of Asia or to recent European or American influence. There are several, however, which are more directly analogous to games played by the American Indians. The resemblance of *mai-ka* to the game of *chunkee* has already been pointed out (Andrew MacFarland Davis, *Indian Games*, Bulletin of the Essex Institute, Salem, 1885, vol. XVII, p. 126). To this must be added the stone-dice game, or *lu-lu*, which resembles the game played with bone disks by the Micmac and Cheyenne Indians (see *Chess and Playing Cards*, Report U. S. Nat. Museum, 1896, figs. 14, 25); also the games of *pa-hu* and *mo-a*, which are not unlike games played by the Sioux and other plains tribes. The most striking analogy, however, exists between the guessing game of *pu-he-ne-he-ne* and certain Indian games in which a stone or other object is hidden in one of four places. The resemblance here extends even to the use of the stick to strike the supposed place of concealment. A systematic comparison of *pu-he-ne-he-ne* with the American games will be given in the writer's paper on *Indian Guessing Games* now in course of preparation.

THE NEW YEAR FESTIVAL

The *Ma-ka-hi-ki*, or New Year festival, in the latter part of the month of *We-le-hu*,[1] was devoted to sports and general gambling. On the 23d day of the moon of *We-le-hu*, the image of Lo-no ma-ku-a,[2] the *Ma-ka-hi-ki* god, was decorated. This idol, according to Alexander,[3] was like a round pole, 12 feet long, and 3 or 4 inches in diameter, with a head carved at one end. A cross-stick, about 6 feet long, was fastened to its neck, at right angles to the pole, to which were attached feather wreaths, and an imitation of a sea-bird, the *ka-u-pu*,[4] was perched upon it. A long white *kapa*, like a sail, was fastened at the top to the cross-piece, and left loose at the bottom. There was also made a short idol, called *A-ku-a pa-a-ni* (god of sport) and *Ma-ka-wa-hi-ne*, because it was set up at boxing matches and other games. The next night fires were lighted on the shore, all around the island, and the people went to bathe in the sea, warming themselves at the fires.

[1] The ancient Hawaiians divided the year into twelve months of 30 days each. As this gave but 360 days to their year, they added and gave to their god Lono in feasting and festivity the number of days required to complete the sidereal year, which was regulated by the rising of the Pleiades.

[2] Lo-no was the fourth of the four great gods that were worshiped throughout Polynesia. He had a separate order of priests and temples of a lower grade. Traditions connected with the ancient kings Lonokawai and Lono-i-ka-makahiki, seem to have been mixed with those belonging to the primeval god Lo-no. Lono-i-ka-maka-hiki is reputed to have instituted the games which were celebrated during the *Ma-ka-hi-ki* festival. He is said on some account to have become offended with his wife and murdered her; but afterward lamented the act so much as to induce a state of mental derangement. In this state he traveled through all the islands, boxing and wrestling with everyone he met. He subsequently set sail, in a singularly shaped canoe, for Tahiti, or a foreign country. After his departure he was deified by his countrymen, and annual contests of boxing and wrestling were instituted in his honor.

[3] Op. cit., p. 59.

[4] A large black bird, the size of a turkey, found mostly in Nihoa and Kaula.

This was a rite of purification, after which they all put on new *ma-lo* and *pa-u*.

The next morning the festival began, and for four days no work was permitted. Land and sky and sea were tabu to *Lo-no*, and only feasting and games were allowed. The high-priest was blindfolded and remained in seclusion for five days. Meanwhile all the *ko-no-hi-ki* (headmen) on the island had been getting ready the taxes of their respective lands, in anticipation of a visit from the long god who was now making a tour of the islands. The long god was preceded by a man carrying two long rods which he set up in the ground on arriving at the boundary of a land. The land was then under tabu or interdict, and no one could leave it until the tax was fully paid. The taxes were brought to the *a-hu*, and when the tax collector was satisfied, the priest chanted a prayer to Lo-no, the crowd joining in the responses, closing with the shout *Au-le e Lo-no!*—when the land became *no-a* or free, and the long idol moved to the next land.

As evening came on, the people assembled from the surrounding country to see the boxing-matches, etc., under the immediate patronage of the short god. For the next two days there were carried on all kinds of sports, such as boxing, wrestling, sliding down hill, throwing the *mai-ka*, foot-racing, etc., attended with general gambling and revelry.

On the fifth day, called *Lo-no*, the bandage was taken from the eyes of the high-priests, and canoes were allowed to go fishing for that day. The tabu was then resumed until the long idol returned, i. e., for about twenty days. On the evening of that day the *Ka-lii* ceremony was performed, as follows:

The king with a numerous company went fishing, taking the long idol with him. On his return, he was accompanied by a warrior, expert in the spear exercise. As the king leaped ashore a man rushed forward with two spears bound with white kapa, and hurled one at him, which was parried, after which he simply touched the king with the other spear, and the ceremony was over.[1] This was followed by sham fights, until the king put a stop to them and repaired to the *he-i-au* (temple) to pay his devotions to Lo-no.

The next day the long idol was stripped of its ornaments, which were packed up and deposited in the temple for use another year, and a white canoe, called Lo-no's canoe, to return to *Ka-hi-ki* in, was sent to sea, after which all restrictions on fishing and farming were removed (*no-a ka ma-ka-hi-ki*).

GAMES

1. *Ko-wa-li:* JUMPING-ROPE.—The rope may be swung by two persons, by one person with the other end fastened, or by one person who also jumps. Two girls frequently jump together, counting until they miss. Andrews gives *pu-he-o-he-o* as "a sport of children like jumping the rope." *Ko-wa-li*, the term given by my informants, is the name of the convolvulus, the vine of which is used as a rope.

Taylor[2] describes the skipping rope of New Zealand under the name *he piu*. Two persons generally hold the rope, and a third skips over it; sometimes they tie an end of the rope to a post and one twirls the rope while several jump over at the same time. It is also used by one person as with us.

2. *Le-le-ko-a-li:* SWINGING.—A single rope is used, to which a stick is attached, across which one person sits, while another sits facing him astride his legs. The swingers are pulled by ropes from the opposite side. The name is from *le-le*, "to fly," and *ko-a-li*, the convolvulus, the vine formerly used for swings.

Ellis[3] says of the Tahitians that they were very fond of the *tahoro*, or swing, and frequently suspended a rope from a branch of a lofty tree, and spent hours in swinging backward and forward. They used the rope singly, and at the lower end fastened a short stick.

[1] Alexander states that Kamehameha always caught the spear himself.
[2] Op. cit., p. 173.
[3] Op. cit., I, p. 228.

Williams[1] describes the Fijian swing as supplying a favorite amusement to children and young people. It consists of a single cord, either a rope or strong vine, suspended from a tree and having at its lower end a loop in which to insert one foot as in a stirrup, or a knot on which both feet rest. Grasping at a convenient height the cord, which varies in length from 30 to 50 feet, the swinger is set in motion and rejoices to dart through the air, describing an arc that would terrify a European.

Tregear[2] describes a New Zealand swing, *morere* or *moari*, consisting of a pole with ropes at the top held by runners, the "giant's stride," sometimes played on the edge of cliffs, half the swing being over the abyss.

Taylor,[3] under *he morere, he moari*, says: "This is a lofty pole, generally erected near a river, from the top of which about a dozen ropes are attached; the parties who use it take hold of them, and swing round, going over the precipice, and, whilst doing so, sometimes let go, falling into the water. Occasionally serious accidents have thus occurred by striking the bank."

3. *Ma-hi-ki:* SEE-SAW.—This is commonly played by girls, who sit astride a board. Two or three sit on each side with two boys standing back to back in the middle.

Wilkes[4] says:

"They had likewise the amusement of see-saw, which has not yet gone out of fashion, and is performed in a manner somewhat different from ours. A forked post is placed in the ground; on this a long pole is placed, which admits several on each side. After two or three ups and downs, they try which shall give the opposite party a tumble. This is, at times, adroitly done, and down they all fall, to the infinite amusement both of their adversaries and the bystanders, who indulge in loud laughter and merriment at the expense of those who are so unlucky as to get hurt."

4. *Ho-lo-li-o:* "HORSE-RIDING."—Boys play "horse," riding astride a stick.

[1] Op. cit., p. 127.
[2] Page 115.
[3] Page 173.
[4] Vol. IV, p. 47.

5. *Ku-al-a-poo:* "HEAD-STANDING."—Turning somersaults is a common pastime of boys.

6. *Pe-le-pe-le:* BOXING.—Boxing gloves are now used, but formerly the hands were wrapped with kapa, tied at the wrist. Captain King,[1] in his journal of Cook's voyage, describes boxing among the Hawaiians as follows:

"We found a vast concourse of people assembled on a level spot of ground at a little distance from our tents. A long space was left vacant in the midst of them, at the upper end of which sat the judges, under three standards, from which hung slips of cloth of various colors, the skins of two wild geese, a few small birds, and bunches of feathers. When the sports were ready to begin, the signal was given by the judges and immediately two combatants appeared. They came forward slowly, lifting their feet very high behind, and drawing their hands along the soles. As they approached, they frequently eyed each other from head to foot in a contemptuous manner, casting several arch looks at the spectators, straining their muscles, and using a variety of affected gestures. Being advanced within reach of each other, they stood with both arms held out straight before their faces, at which part all their blows were aimed. They struck, in what appeared to our eyes an awkward manner, with a full swing of the arm; made no attempt to parry, but eluded their adversary's attack by an inclination of the body, or by retreating. The battle was quickly decided, for if either of them was knocked down, or even fell by accident, he was considered vanquished."

Ellis says that in Tahiti, "on all great festivals, wrestling was succeeded by the *moto-raa* or boxing. It was mostly practiced by the lower orders and servants of the Areois, and was with them, as boxing is everywhere, savage work. The challenge was given in the same way as in wrestling. The blows were generally straight-forward, severe, and heavy; usually aimed at the head. They fought with the naked fist, and the whole skin of the forehead has been at times torn or driven off at a blow."

Captain Cook[2] states that the method of boxing in the Marque-

[1] *A Voyage to the Pacific Ocean*, 2d ed., London, 1784, vol. III, p. 22.
[2] Vol. III, p. 244.

sas differed very little from that practiced in England, but speaks of seeing boxing matches between women in the presence of at least three thousand people.

7. *Ka-ka-pa-hi:* FENCING.—Fencing is practiced on holidays with wooden swords. The name is derived from *ka-ka*, "to strike," and *pa-hi*, "knife," "sword."

8. *Ku-la-ku-lai:* WRESTLING.—The contestants wear only breechcloths. They each put one arm around the other's neck and the other around his waist. People bet on the contest. Andrews gives *ka-hu-a mo-ko-mo-ko* as "a place where people assemble to wrestle."

In Tahiti, according to Ellis,[1] wrestling, *maona*, was the favorite sport at the *taupiti*, or public assemblies, festivals usually connected with some religious ceremony or cause of national rejoicing. The wrestlers of one district sometimes challenged those of another, but the conquest often took place between the inhabitants of different islands. In this, as in most of their public proceedings, the gods presided. Before wrestling commenced, each party repaired to the *marae* of the idols of which they were the devotees. Here they presented a young plantain tree, which was frequently a substitute for a more valuable offering, and having invoked aid of the tutelar deity of the game, they repaired to the spot where the multitude had assembled. A space covered with grassy turf, or the level sand of the sea-beach, was usually selected for these exhibitions. Here a ring was formed, perhaps thirty feet in diameter. The inner rank sat down, the others stood behind them; each party had their instruments of music with them, but all remained quiet until the games began. Six or ten, perhaps, from each side, entered the ring at once, wearing nothing but the *maro*, or girdle, and having their limbs sometimes anointed with oil. Challenges were sent previous to the arrival of celebrated wrestlers, but if no such arrangement had been made, the wrestlers of one party or perhaps their champion walked

[1] Vol. I, p. 204.

around and across the ring, having the left arm bent, with the hand on the breast, and gave the challenge by striking the right hand violently against the left, and the left against the side, which produced a loud, hollow sound. Several were sometimes engaged at once, but more frequently only two. They grasped each other by the shoulders. Unbroken silence and deep attention were manifested during the struggle; but as soon as one was thrown, the drums of the victor's friends struck up, the women rose and danced in triumph over the fallen wrestler and sang in defiance to the opposite party. The latter immediately commenced a most deafening noise, principally to mar and neutralize the triumph of the victors. When the wrestlers engaged again, the clamor ceased. The victor either withdrew, which was considered honorable, or remained and awaited a fresh challenge. When the contest was over, the men repaired again to the temple and presented their offering of acknowledgment, usually young plantain trees, to the idols of the game.

Captain Cook[1] speaks of wrestling being performed in the Marquesas in the same manner as at Tahiti.

Taylor[2] says that in New Zealand *te takaro ringaringa*, or wrestling, was a very general amusement of young men, who prided themselves on their skill in throwing one another, as much, perhaps, as our own countrymen have ever done. Tregear[3] speaks of it as played with any hold.

J. Stanley Gardiner[4] says that in Rotuma "in wrestling any fall to the ground counted. The chosen champions watched each other carefully from a distance, and then, perhaps, one would rush on the other and make a feint, only to turn aside when they seemed bound to come to close quarters. The great idea was to get one's opponent, from the nature of his or your rush, into an awkward position, so that he could be seized around one thigh, and could not avoid a fall."

[1] Vol. III, p. 244.
[2] Page 173.
[3] Page 115.
[4] *Journal Anthropological Institute*, vol. XXVII, p. 486.

9. *U-ma:* WRIST- OR ARM-WRESTLING.—The two contestants grasp hands, their elbows resting upon the ground, and each endeavors to press the other's arm over. This is known in Japan as *hizi-zumo*, "elbow-wrestling," or *ude-zumo*, "arm-wrestling." Prof. Edward S. Morse informs me that wrist-wrestling is practiced also by Spaniards and Cubans, each contestant putting his elbow on a piece of money from which he may not remove it.

10. *U-lu-mi i-lo-ko o-ke kai:* "WRESTLING IN THE SEA."—One man tries to "duck" another and reach shore before the ducked one can catch him. The winner receives the stake of roast pig, cocoanuts, or whatever it may be.

11. *Hu-ki-hu-ki-kau-la:* "ROPE-PULLING," TUG-OF-WAR.—The teams consist of seven men on each side, each with a captain. A piece of kapa is tied to the middle of the rope and it is required to pull it a certain distance to one side or the other in order to win. It is played for money prizes.

Stair[1] says that in Samoa "pulling, or trial of strength, was similar to the English tug-of-war, in which each side endeavored to get possession of a pole held between them."

12. *Hu-ki-hu-ki-a-i:* "NECK-PULLING."—Each of two persons puts a loop around his neck and pulls, endeavoring to pull the other over. The contest is engaged in for small prizes. It is known in Japan by the name *kubi hiki.*

13. *Hu-ki-hu-ki-li-ma:* "FINGER-PULLING."—Two persons lock forefingers and each endeavors to pull the other's finger straight out.

14. *Hei-hei-ku-ki-ni:* "FOOT-RACING."—A dozen or more men will race for a prize, a favorite holiday amusement, the stake being a pig, cocoanuts, or bread-fruit. The course is usually one-half to three-quarters of a mile. The starting point is called *pa-hu-ku*, and the goal *pa-hu-ho-pu*. The runners, *ku-ki-ni*, are entirely naked except for a breechclout. *Ku-ki-ni* means "runner." The *ku-ki-ni* was formerly a government officer, whose duty it was to

[1] Op. cit., p. 136.

carry orders to different parts of the island, and such were held in estimation according to their fleetness.[1] In his journal of Cook's voyage to the Pacific ocean,[2] Captain King, speaking of the Hawaiians, says: "They frequently amuse themselves with racing matches between the boys and girls; and here again they wager with great spirit."

Ellis[3] describes the foot-race of Tahiti under the name of *faatitiaihe-mo raa:*

> "Young men of the opposite parties engaged. Great preparations were made for this trial of strength and agility. The bodies of the runners were anointed with oil; the *maro*, or girdle, their only garment, was bound tight round the loins. A wreath of flowers adorned the brows, and a light white or colored bandage of native cloth was sometimes bound like a turban round the head. A smooth line of sandy beach was usually selected for the course. Sometimes they returned to the place from which they started, but in general they ran the prescribed distance in a straight line."

15. *Hei-hei-haa-we:* "BURDEN-RACING."—This is a contest in which each of the participants carries another astride his neck.

16. *Hei-hei-e-ke:* "SACK-RACING."—Eight men usually race, starting from a line, running to a goal and back to the line.

17. *Le-le-wa-wae-ka-hi:* "ONE-FOOT JUMPING," HOPPING.—Contestants tie one leg and run races, hopping on one foot.

18. *Le-le-le-la-au:* "STICK-JUMPING," VAULTING.—Vaulting is practiced with the aid of a long pole.

19. *Hei-hei-hu-i-la-ba-la-la:* "WHEELBARROW RACING."—This is a sport of recent introduction.

20. *Hei-hei-au:* "SWIMMING RACE."—Men and boys play, either in fun or for a prize of food or money.

21. *Hei-hei-waa:* "CANOE-RACING."—Two or more canoes race, usually out to sea, the course being a mile or a mile and a half out and around a flag buoy and return. The canoes are propelled with kapa sails.

[1] Andrews, *Hawaiian Dictionary.*
[2] Vol. III, p. 145.
[3] Vol. I, p. 210

Ellis[1] speaks of Tahiti canoe-racing, *faatitiaihe-mo raa vaa*, as "occasionally practiced on the smooth waters of the ocean, within the reefs." J. Stanley Gardiner[2] relates that in Rotuma—

"canoe-sailing was carried on, especially on the occasions of certain big feasts in connection with the *sou*. The canoes employed were the small ones, the *tavane*, with mat sails. In each canoe only one man sailed, and the different districts would contest the prize with ten, twenty, or even more representatives. There were also commonly canoe-races for the women. The course was always inside the reef, and much fun was caused by the constant capsizing of the canoes."

22. *Hei-hei-ka-pu:* "TUB-RACING."—Tubs for racing are made out of casks cut in halves, and propelled with the hands. Andrews gives *ka-pu-wai*, from *ka-pu*, "place," and *wai*, "water," a bathing tub.

23. *Hei-hei-na-lu:* "SURF-RACING."—The surf-board, *pa-pa-hee-na-lu*, is made from the wood of the *wi-li-wi-li* (*Erythrina corallodendrum*) or bread-fruit tree. Ellis[3] describes it as generally five or six feet long, and rather more than a foot wide, sometimes flat, but more frequently slightly convex on both sides. It is usually made of the wood of the *Erythrina*, stained quite black and preserved with great care. After using, it is placed in the sun until perfectly dry, when it is rubbed over with cocoanut oil, frequently wrapped in cloth, and suspended in some part of the dwelling. Dr Bolton[4] describes the play as follows:

"Plunging through the nearer surf, the natives reached the outer line of breakers, and watching their opportunity they lay flat upon the board (the more expert kneeled), and just as a high billow was about to break over them, pushed landward in front of the combers. The waves rushing in were apparently always on the point of submerging the rider, but, unless some mishap occurred, they drove him forward with rapidity on to the beach or into shallow water."

[1] Vol. I, p. 210.
[2] *Journal Anthropological Institute*, vol. XXVII, p. 486.
[3] Vol. IV, p. 369.
[4] *Journal of American Folk-lore*, vol. IV, p. 21.

Racing in the surf is called *hei-hei-na-lu*, from *hei-hei*, "to race," and *na-lu*, "surf." Two champions will swim out to sea on boards and the one first arriving on shore wins.

Playing in the surf is *hee-na-lu*, from *hee*, "to glide." Andrews gives the names *o-lo* and *o-wi-li* for "a very thick surf-board made

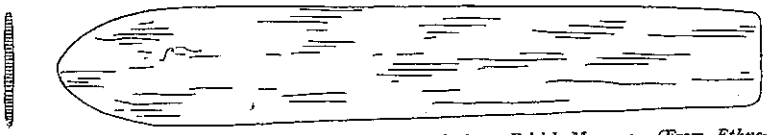


FIG. 4—Surf-board of hard, blackened wood; length, 71 inches. British Museum. (From *Ethnographic Album of the Pacific Islands*, II, 33, No. 1.)

of *wi-li-wi-li*," and *o-ni-ni* as "a kind of surf-board"; also *pa-ha* as "a name for surf-board," and *ki-o-e*, the "name of a small surf-board."

According to Brigham[1]—

"Surf-boards were usually made of *ko-a*, flat with slightly convex surface, rounded at one end, slightly narrowing towards the stern, where it was cut square. Sometimes the *pa-pa* were made of very light *wi-li-wi-li* and then were narrow, *o-lo*. In size they varied from 3 to 18 feet in length and from 8 to 10 inches in breadth, but some of the ancient boards are said to have been 4 fathoms long. The largest in this museum are so heavy that they require two men to move them. The surf riders swam out to sea to the *ku-la-na* or place where the high rollers follow each other in quick succession, and there mounted a high wave and rode on it until near the beach where the water was smoother; the first one arriving at the *hu-a* won the race. The riders sometimes raced also to the *ku-la-na* or starting place. Standing on the boards as they shot in was by no means uncommon. Men and women both took part in this delightful pastime which is now almost a lost art."

Wilkes[2] says: "The Kingsmill islanders use a small board in swimming in the surf like that used by the Sandwich islanders." According to Codrington,[3] "in the Banks' islands and Torres islands, and no doubt in other groups, they use the surf board, *tapa*."

[1] *Preliminary Catalogue*, part II, p. 55.
[2] Op. cit., vol. V, p. 100.
[3] Op. cit., p. 341.

24. *Le-le-ka-wa:* "PRECIPICE-JUMPING."—Leaping from lofty cliffs into the sea is a favorite pastime. The feat is performed as a game, the first one reaching the goal being regarded as the winner. The name is from *ka-wa*, "a precipice," and *le-le*, "to jump."

25. *O-i-li-pu-le-lo.*—A former sport of the chiefs was to send lighted firebrands down a *pa-li*, or precipice, at night. It is thus described by an eye-witness [1]:

"On dark, moonless nights from certain points of these precipices,—where a stone would drop sheer into the sea,—the operator takes his stand with a supply of *pa-pa-la* sticks (a light and porous indigenous wood), and, igniting one, launches it into space. The buoyancy of the wood and the action of the wind sweeping up the face of the cliffs, cause the burning branch to float in mid-air, rising or falling according to the force of the wind, sometimes darting far seaward, and again drifting towards the land. Firebrand follows firebrand, until, to the spectators who enjoy the scene in canoes upon the ocean hundreds of feet below, the heavens appear ablaze with great shooting stars, rising and falling, crossing and recrossing each other in a weird manner. So the display continues until the firebrands are consumed, or a lull in the wind permits them to descend slowly and gracefully into the sea."

The *papala* tree (*Charpentiera ovata*) attains the height of about twenty feet and grows only upon the highlands from two to three thousand feet above the sea.

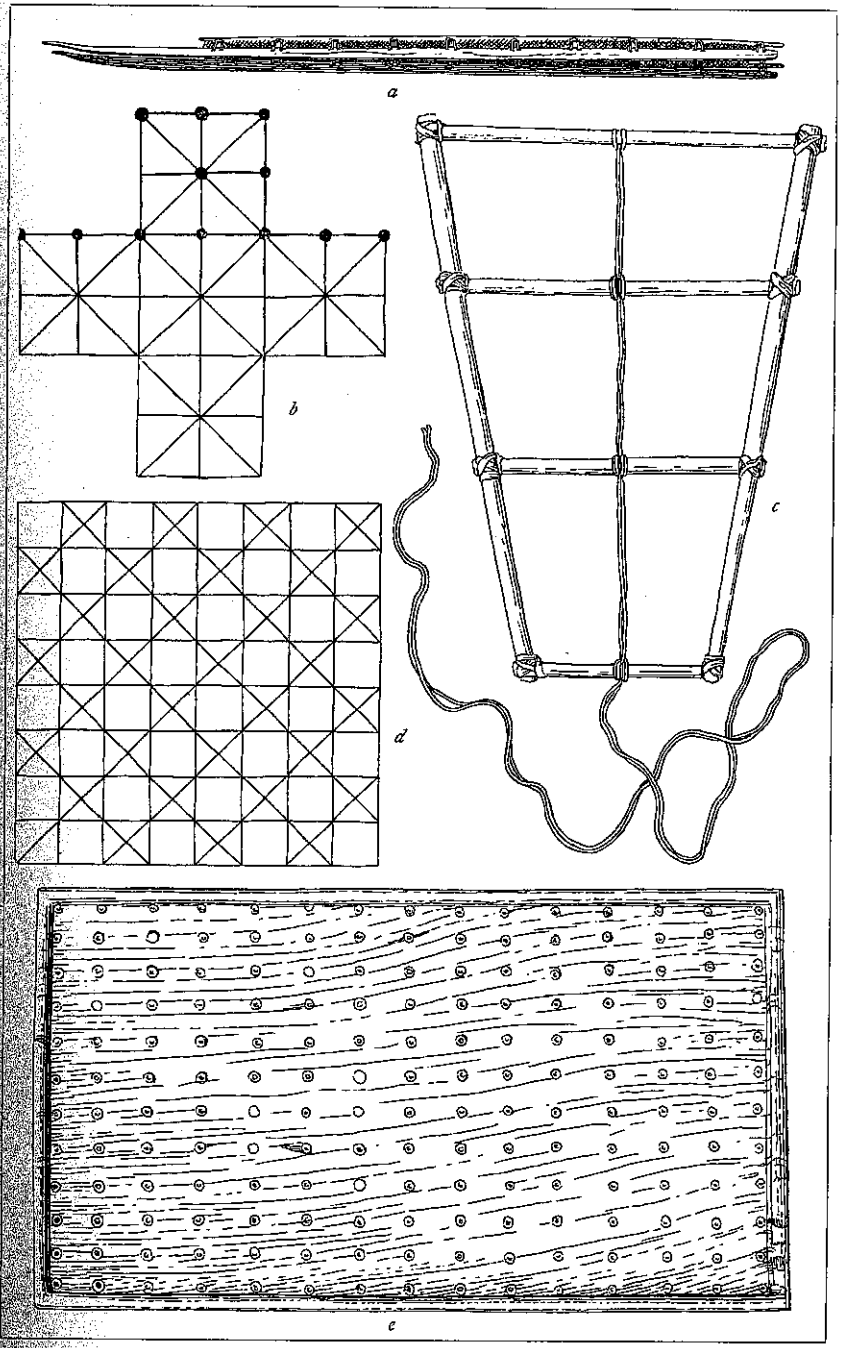
26. *Hee-ho-lu-a:* "SLEDGE-SLIDING."—Two persons, stretched at full length, slide together head-first down hill on a smooth board (*ho-lu-a*). Several often compete, the one down first winning a prize. My informants state that the game is no longer practiced.

Of this pastime Ellis [2] says:

"The *ho-lu-a* has for many generations been a popular amusement throughout the Sandwich Islands, and is still practiced in several places. The *pa-pa* or sledge is composed of two narrow runners, from

[1] Mrs Francis Sinclair, Jr, *Indigenous Flowers of the Hawaiian Islands*, London, 1885. Quoted from Dr Bolton.

[2] Vol. IV, p. 299.



HAWAIIAN GAMES

a, *Pa-pa ho-lu-a*—Sledge for hill-sliding (No. 320, Bishop Museum); *b*, Board for *ma-nu*; *c*, *Pu-waa-pa*—Canoe puzzle (No. 21,445, Museum of Archeology, University of Pennsylvania); *d*, Board for *moa*, draughts; *e*, Board for *ko-na-ne* (No. 867, Bishop Museum).

7 to 12 or 18 feet long, two or three inches deep, highly polished, and at the foremost end tapering off from the under side to a point at the upper edge. There two runners are fastened together by a number of short pieces of wood laid horizontally across. To the upper edge of these short pieces two long, tough sticks are fastened, extending the whole length of the cross-pieces and about 5 or 6 inches apart. Sometimes a narrow piece of matting is fastened over the whole upper surface, except three or four feet at the foremost end, though in general only a small part for the breast to rest on is covered. At the foremost end there is a space of about two inches between the runners, but they widen gradually towards the hinder part, where they are distant from each other 4 or 5 inches. The person about to slide grasps the small side-stick firmly with his right hand, somewhere about the middle, runs a few yards to the brow of the hill, or starting place, where he grasps it with his left hand, and at the same time, with all his strength throwing himself forward, falls flat upon it, and slides down the hill, his hands retaining their hold of the side-sticks, and his feet being fixed against the hindermost cross-piece of the sledge. Much practice and address are necessary, to assume and keep an even balance on so narrow a vehicle, yet a man accustomed to the sport will throw himself with velocity and apparent ease a hundred and fifty or two hundred yards down the side of a gradually sloping hill."

Brigham [1] states that [1]—

"the *ho-lu-a*, or track, was built with great care on a hill-side, and the remains of one are plainly seen on the hill, *mau-ka*, of the Museum. Constructed of stone when a hollow in the track needed filling, the *ho-lu-a* was covered with earth well beaten down, and dry grass was spread over all, and a very slippery surface resulted. The sled, *pa-pa ho-lu-a*, was made of *ma-ma-me* (*Erythrina crysophylla*) or of *u-hi-u-hi* (*Cæsalpinia kauaiensis*). Two long runners resembling skate irons were bound firmly to the upper stage $2\frac{1}{2}$ inches apart from the centers, the whole sled being some $11\frac{1}{4}$ feet long. This *pa-pa* was carefully oiled with *ku-kui* oil, and the rider ran with the sled to gather impulse, and then threw himself headlong down the course. This was an eminently aristocratic game."

Two sledges are preserved in the Bishop Museum; one of which (plate XI, *a*) is said to have belonged to the hero Lonoikamakahiki. The other (Cat. No. 321) consists of the runners only.

[1] *Preliminary Catalogue*, part II, p. 56.

It is related that the goddess Pele enjoyed this game and frequently engaged in it. Ellis[1] relates the story of the contest of the goddess with Kahavari, chief of Puna, in which she drove him from the island by a stream of lava.

27. *Ku-ku-lu-a-e-o:* STILTS.—Walking or racing on stilts is a common amusement of men, boys, and girls. Andrews mentions *o-he* as timber suitable for making stilts, and gives *ha-ka-ke*, "to stand on stilts."

In the Marquesas islands stilts were used, the foot-rests of which were highly carved. These rests were lashed to poles six feet in length which also were carved. Examples of the rests in the Museum of the University of Pennsylvania (Cat. No. 18,016) are carved, as is usual, with human figures. Brigham[2] reports specimens in many European collections, and in the Musée de Marine in the Louvre, a pair attached to poles for use. Another pair of carved bamboo stilts in the Christy collection, designated as "dancing stilts," are figured by Ratzel.[3]

Ellis[4] says that in Tahiti walking on stilts was a favorite amusement with the youth of both sexes. The stilts were formed by nature and generally consisted of the straight branches of a tree, with a smaller branch projecting on one side. The bare feet were placed on this short branch, and thus, elevated about three feet from the ground, they pursued their pastime. Stilt-walking in New Zealand is mentioned by Taylor[5] under the name of *pouturu*, and Tregear[6] adds *araporaka*.

28. *Pai-pai-li-ma:* HAND-CLAPPING.—Two persons stand opposite each other and clap their hands in the same manner as played by children in the United States. The movements are as follows: (1) both clap hands, (2) clap left hands, (3) clap hands, (4) clap right hands, (5) clap hands, (6) clap each other's hands, and then repeat. This is described as a girls' game. They sing, keeping time to the play.

[1] Vol. IV, p. 300.
[2] *Director's Report, Bishop Museum*, Honolulu, 1898.
[3] *History of Mankind*, vol. I, p. 193, London, 1896.
[4] Vol. I, p. 228.
[5] Op. cit., p. 174.
[6] Op. cit., p. 116.

29. *Ku-hi-ku-hi-ma-ka:* "EYE-POINTING."—Two or more persons play. One leads by pointing repeatedly with his finger to his nose, crying "Nose! Nose! Nose!" All the others must then point in the same manner, each with his finger to his eye. The leader changes to his eye, whereupon each of the others must point to his ear. He points to his ear, and they point to the mouth; to the mouth, and they point to the top of the head; to the top of the head, and they clap their hands; the leader then claps his hands and the others point to the breast; finally he points to his breast and they all run and the game comes to a close.

30. *Ku-hi-la-au:* "WOOD-POINTING."—This game is like the preceding. The leader points to the top of a stick or a piece of wood, crying *Ma-lu-na! Ma-lu-na!* ("Above! Above!"); the others must then point to the middle. He then points to the middle, crying *I-wae-na! I-wae-na!* ("Between! Between!"), and the others must point to the bottom. He points to the bottom, crying *Ma-la-lo! Ma-la-lo!* ("Below! Below!"), whereupon the others must point to the side. The leader points to the side, crying *Ao-ao! Ao-ao!* ("Side! Side!"), when the others point to the top again.

31. *O-lo-lo:* "RUBBING."—The feat of rubbing one thigh with the right hand and patting the other with the left hand.

32. *Hu-i-la-ma-ka-ni.*—The feat of describing opposing circles with the hands and arms.

33. *O-le-ha.*—An amusement consisting in placing a stick, about two inches long, between the eyelids to prop them open. The name means, primarily, to set or fix the eyes.

Ellis[1] says that in Tahiti "the *teatea mata* was a singular play among the children, who stretched open their eyelids by fixing a piece of straw, or stiff grass, perpendicularly across the eye, so as to force open the lids in a most frightful manner."

34. *Ha-ka mo-a:* "COCK-FIGHTING."—Cocks (*mo-a ka-ne, mo-a*

[1] Op. cit., vol. I, p. 228.

ka-ka-la) are fought on holidays in the public squares, bets of pigs, chickens, cocoanuts, etc., being wagered on the contests. The battles are to the death. The combs are not trimmed, but the spurs are cut off and the cocks fight with their beaks. A good fighting cock costs five dollars. The name is from *ha-ka*, "to fight," and *mo-a*, "a fowl." A drawn game is called *pai-wa-le*, and the assembly at a cockfight, *a-ha-mo-a*.

Ellis[1] states that cock-fighting (*faatito raamoa;* literally, causing fighting among fowls) was the most ancient game among the Tahitians. He remarks:

"The traditions of the people state that fowls have existed in the islands as long as the people, that they came with the first colonists, or that they were made by Taaroa at the same time that men were made. The traditions and songs of the islanders connected with their amusements are as ancient as any in existence among them. They do not appear to have laid bets on their favorite birds, but to have trained and fought them for amusement. The fowls designed for fighting were fed with great care; a finely carved *fatapua*, or stand, was made as a perch for the birds. This was planted in the house, and the bird fastened to it by a piece of cinet, braided flat, that it might not injure the leg. No other substance would have been secure against the attacks of his beak. Their food was chiefly *poe*, or bruised bread-fruit, rolled up in the hand like paste, and given in small pieces. The fowl was taught to open his mouth to receive his food and his water, which was poured from his master's hand. It was also customary to sprinkle water over these birds to refresh them. The natives were universally addicted to this sport. The inhabitants of one district often matched their birds against those of another, or those of one division of a district against those of another. They do not appear to have entertained any predilection for particular color in the fowls, but seem to have esteemed all alike. They never trimmed any of the feathers, but were proud to see them with heavy wings, full-feathered necks, and long tails. They also accustomed them to fight without artificial spurs or other means of injury. In order that the birds might be as fresh as possible, they fought them early in the morning, soon after day-break, while the air was cool, and before they became languid from heat. More than two were seldom engaged at once, and as soon as one bird avoided the other, he was considered as *vi*, or beaten. Victory was declared in favor of his opponent, and they were immediately parted. This amusement was sometimes continued for several days successively, and, as well as the other recreations, was patronized by their idols. Ruaifaatoa, the god of cock-fighters, appears among the earliest of their inferior divinities."

[1] Op. cit., vol. I, p. 221.

J. Stanley Gardiner[1] says of Rotuma: "The chiefs used to breed a small cock, somewhat similar to the Malayan fowl; great care was taken in the feeding, and the spur was especially sharpened and oiled. Usually pigs were put up on both sides, and went to the conquerors."

35. *Ho-pu-ho-pu-na-lo:* "DRAGONFLY-CATCHING."—Children catch dragonflies, *pi-nau*, in a net, crying out the number, one, two, three, four, and so on, as they catch them. The one who first gets ten wins. All then stop, and putting the dragonflies in their handkerchiefs, count "one, two, three," and release them.

36. *Le-le-pi-nau:* "DRAGONFLY-FLYING."—Children catch dragonflies and tie them to a string to see which can fly farthest.

37. *Au-waa-lau-ki:* "LEAF-CANOES."—Children fold up *ki* (*Dracena terminalis*) leaves and sail them (Andrews). The name is derived from *au-waa*, a fleet, and *lau-ki*, the leaf of the *ki* plant.

Ellis[2] describes Tahitian children constructing small canoes, boats, or ships, and floating them in the sea. "Although they are rude in appearance," he says, "and soon destroyed, many of the boys display uncommon ingenuity in constructing this kind of toy. The hull is usually made with a piece of light wood of the hibiscus, the cordage of bark, and the sails either of the leaflets of the cocoanut, or the native cloth. They usually fix a stone to the bottom of the little barks, which keeps them upright."

38. *Kii-pe-pe:* "DOLLS."—Little girls make dolls out of stones which they wrap in banana leaves.

39. *Pe-pa pa-a-ni:* "PAPER PLAY."—Children fold paper (*pe-*

[1] *Journal Anthropological Institute*, vol. XXVII, p. 486.
[2] Vol. I, p. 227.

pa) or kapa into a variety of shapes, as a bird, *ma-nu* (see figure 5), which glides down like a bird in the air. Other forms are a box (*po-ho-kui-i*) for pins and needles, and neckties (*lei-a-i*). They also weave strips of kapa into mats, *mo-e-na*, and braid.

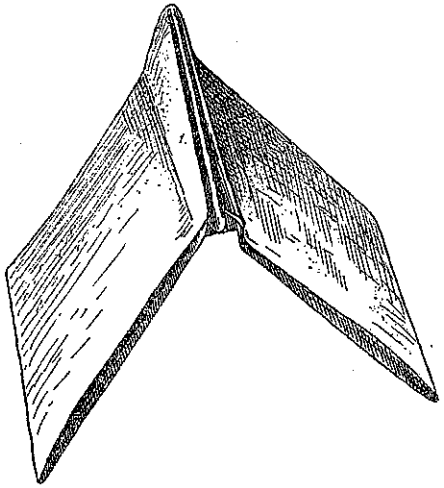


FIG. 5—*Pe-pa ma-nu*, paper bird (No. 21,499, Museum of Archeology, University of Pennsylvania).

40. *Po-ka-kaa:* BUZZ.—The buzz is made of a disk of bark (said to be of the *hau*) perforated with two holes through which a cord is passed. The name means "wheel." Tregear[1] mentions *porotiti*, a New Zealand boy's game of "twirling a disk."

41. *O-e-o-e:* BULLROARER.—This is made of wood, with a hole in one end through which is passed a cord with which it is whirled. It is known to my informants as a toy. They gave as another name, *ko-wa-li-wa-li*. Andrews gives *ko-he-o-he-o* as "an instrument to assist in mourning or wailing along with other sounds."

Codrington[2] describes the use of the bullroarer, under the name of *buro*, in the Mysteries at Florida, and says it is there only that any superstitious character belongs to it. There is no

[1] Op. cit., p. 115.

[2] Op. cit., p. 342.

EXPLANATION OF PLATE XII

a. *I-hi-pa-hee*—Club for game; length, 41 inches. British Museum. (From *Ethnographic Album of the Pacific Islands*, I, 56, No. 1.)

b. *U-lu-mai-ka*; diameter, $3\frac{1}{8}$ inches. British Museum. (From *Ethnographic Album of the Pacific Islands*, I, 55, No. 15.)

c. *Ki-lu*; diameter, $3\frac{1}{2}$ inches. British Museum. (From *Ethnographic Album of the Pacific Islands*, I, 60, No. 14.)

d. *Pu-la-au*—Wood-puzzles. No. 21,446, Museum of Archeology, University of Pennsylvania.

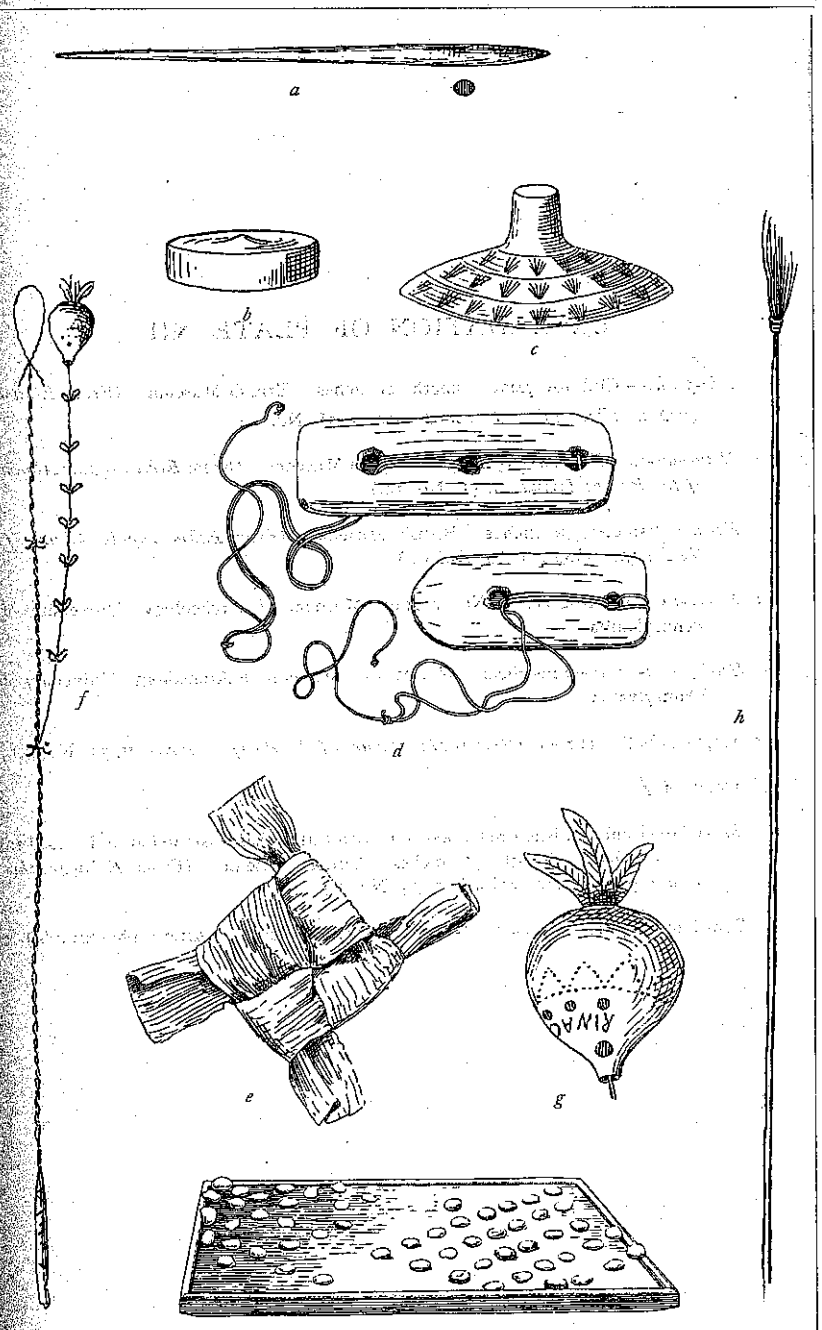
e. *Hu-i-la-ma-ka-ni*—Pin-wheel. No. 21,504, Museum of Archeology, University of Pennsylvania.

f. Cup and ball. (From *Ethnographic Album of the Pacific Islands*, II, 35, No. 1.)

g. Detail of *f*.

h. *Ma-i-le*—Highly polished red-wood rod, with tuft of hair fastened at end; used in *pu-he-ne-he-ne*; length, 36 inches. British Museum. (From *Ethnographic Album of the Pacific Islands*, I, 33, No. 1.)

i. Board and men for *ko-na-ne*. No. 866, Bishop Museum. (After a photograph.)



mystery about it when it is used in the Banks' islands to drive away a ghost, as in Mota, where it is called *nanamatea*, "death maker," or "to make a mourning sound," and as in Merlav, where it is called *wo-rung-tamb*, "a wailer," and is used the night after a death. It is a common plaything. In Vanua Lava they call it *mala*, "pig," from the noise it makes; in Maewo it is *tal-viv*, a "whirring string"; in Araga it is merely *tavire bua*, a "bit of bamboo."

42. *Hu-i-la-ma-ka-ni:* "WIND-WHEEL," PIN-WHEEL.—A toy made of paper or kapa. The paper pin-wheel is identical with that of Europe, but that of kapa has the form shown in plate XII, *e*.

B. T. Sommerville[1] says that in New Georgia, Solomon islands, "toys of pieces of cocoanut fronds are made for children. Three of these are a 'whirligig,' a 'whistler,' and a 'frigate-bird.' The first is a little windmill, which revolves when presented to the wind; the second, an arrangement of cocoanut leaf which, when violently swung round in the air, gives a sound of a large locust humming."

43. *Hu-o-e-o-e:* HUMMING TOPS.—Humming tops are made of small gourds. Andrews gives *o-ka*, "a top made of a small gourd"; *o-kaa*, "a top," "to spin like a top"; *u-li-li*, "a small gourd used for a top to play with"; and *o-ni-u*, "a top for spinning, a plaything for children, generally made of a cocoanut."

44. *Hu-ko-a:* WOODEN TOPS.—Wooden or peg tops are so called from *hu*, top, and *ko-a* (*Acacia koa*), the wood of which they are made. They have iron points. A top is put in the middle of a ring on the ground and the object of the game is to knock it out.

In New Zealand, according to Taylor,[2] *he poro, he potaka, he kaihora, he kaihotaka*, the whipping top, is another game which is played in every part of the island; the top used is more of a

[1] *Journal Anthropological Institute*, vol. XXVI, p. 409.
[2] Op. cit., p. 172.

cone, and of less diameter than our English one, but in other respects is just the same.

Dieffenbach[1] also says that in New Zealand "a top, called *kaihora*, nicely formed and managed as it is by us, supplies another of their amusements."

Codrington[2] says: "Tops are made in the Solomon islands of the nut of a palm and a pin of wood, the whole visible length of which, between two and three inches long, is below the head. To spin the top, a double string is wound round the shaft, and the two ends pulled smartly asunder. A similar top was used in Pitcairn island by the half Tahitian children of the Bounty mutineers."

45. *Ha-no:* SQUIRT-GUN.—Squirt-guns are made of bamboo. Boys and girls play with them on holidays, especially on New Year's day. A specimen in the Berlin Museum für Völkerkunde is made of gourd (*i-pu ha-no-ha-no*).

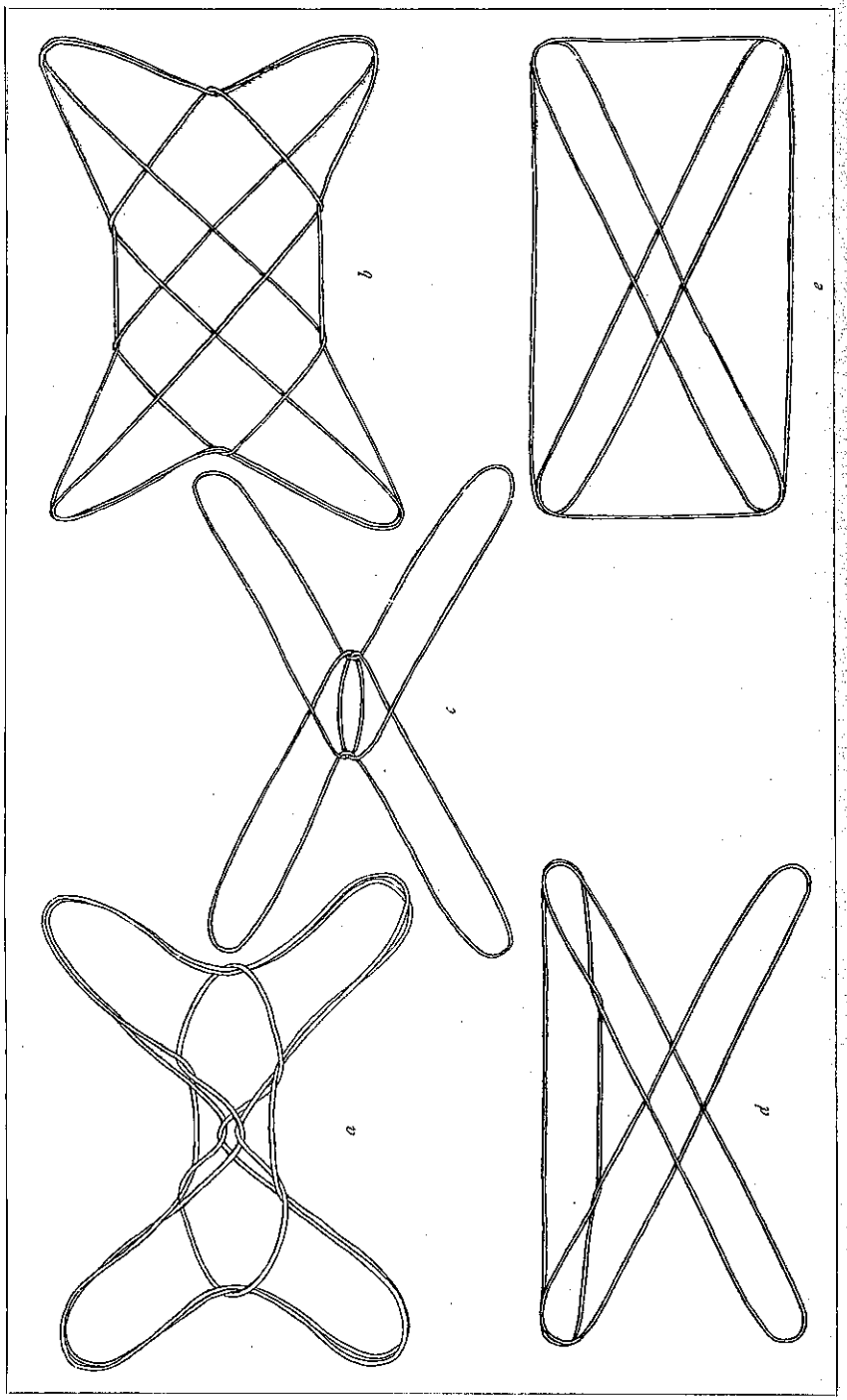
46. *Hu-a ko-pa:* SOAP-BUBBLES.—Soap-bubble blowing is an amusement of children. *Ko-pa* is the Hawaiian pronunciation of soap.

47. *Hei:* CAT'S-CRADLE—A number of cat's-cradles were known to my informants, among which are: (1) *hoo-ko-mo* (plate XIV, *e*); (2) *e-ke-ma-nu*, "ace of diamonds" (plate XIII, *e*); (3) *e-ke-ha-ka*, "ace of hearts" (plate XIII, *a*); (4) *e-ke-pe-ki*, "ace of spades" (plate XIV, *c*); (5) *a-na-ma-nu*, "bird-house" (plate XV, *a*); (6) *pau-ma-wai*, "pump" (plate XIII, *c*); (7) *pa-hi-o-lo*, "saw" (plate XV, *b*); (8) *ma-hi-ki*, "see-saw" (plate XIII, *d*); (9) *wai-u-la-wa* (plate XV, *c*); (10) *ko-he*, "vagina" (plate XIV, *f*); (11) *o-ko-le-a-mo* (plate XIV, *d*); (12) *pa-pi-o-ma-ka-nu-i-nu-i* (plate XIV, *a*); (13) *pa-pi-o-ma-ka-lii-lii* (plate XV, *d*); (14) *u-pe-na*, "net" (plate XIV, *b*); (15) *pou*, "post" (plate XV, *e*); (16) *po*, "darkness" (plate XIII, *b*). Many others are said to be known. A single player makes them with great rapidity, but sometimes another is called on for assistance. The name, *hei*, "net," applied to the game is

[1] Op. cit., vol. II, p. 32.

[2] Op. cit., p. 342.

AMERICAN ANTHROPOLOGIST N. S., VOL. 7, PL. XIII



HAWAIIAN CAT'S-CRADLES

In the Museum of Archeology, University of Pennsylvania.—*a*, *Pu-la-au*; use of hands (No. 31,560); *b*, *Kapa-pa-hee* (No. 31,562); *c*, *Pu-waa-pa* (No. 31,561); *d*, *Wai-kee* (No. 31,564); *e*, *Pu-waa-pa* (No. 31,563). Collected by Stewart Culin (No. 9,440).

said to be derived from that of our "cradle," which is given that name. The cat's-cradle called *po*, or "darkness," may have had the same significance as that of New Zealand described by Taylor.[1] He says: "*He whai* or *maui*, a game very similar to our own, but the cord is made to assume many more forms, and these are said to be different scenes in their mythology, such as *Hine-nui-te-po*, Mother Night bringing forth her progeny, Maru and the gods, and Maui fishing up the land. Men, canoes, houses, etc., also are represented. Some state that Maui invented the game."

Codrington[2] says: "Cat's-cradle, in Lepers' island *lelegaro*, in Florida *honggo*, with many figures, is common throughout the islands."

48. *Pu-la-au:* WOOD-PUZZLE.—A cord is doubled and passed with a noose through two or three holes in a block of wood (plate XII, *d*), the object being to remove the block while another person holds the end of the cord. A variation in form is shown in plate XI, *c*, the *pu-waa-pa*, or "canoe" puzzle. Concerning this my informants stated that it illustrated the following story: "King Kamehameha had a daughter named Kea-hi, who became *enceinte* by a lover of low rank. The king ordered her to be placed in a canoe and taken out to sea and exposed to the elements to die. The canoe was secured by a long rope to the land. Her lover swam out to the canoe and unloosened the rope, and the two escaped in the canoe to another island." A puzzle precisely identical with the block with two holes exists in the writer's collection (16,065) from Saharanpore, India, while another (16,080) with two blocks (perforated canes) at each end of the cord was collected from the Accawais Indians of British Guiana. The last is duplicated by a modern French example (15,519) purchased in Paris.

49. *O-ki-kau-la:* STRING-CUTTING.—One person prepares a string which another cuts at a place indicated, whereupon the first puts the two ends in his mouth and withdraws them united.

[1] Op. cit., p. 172.

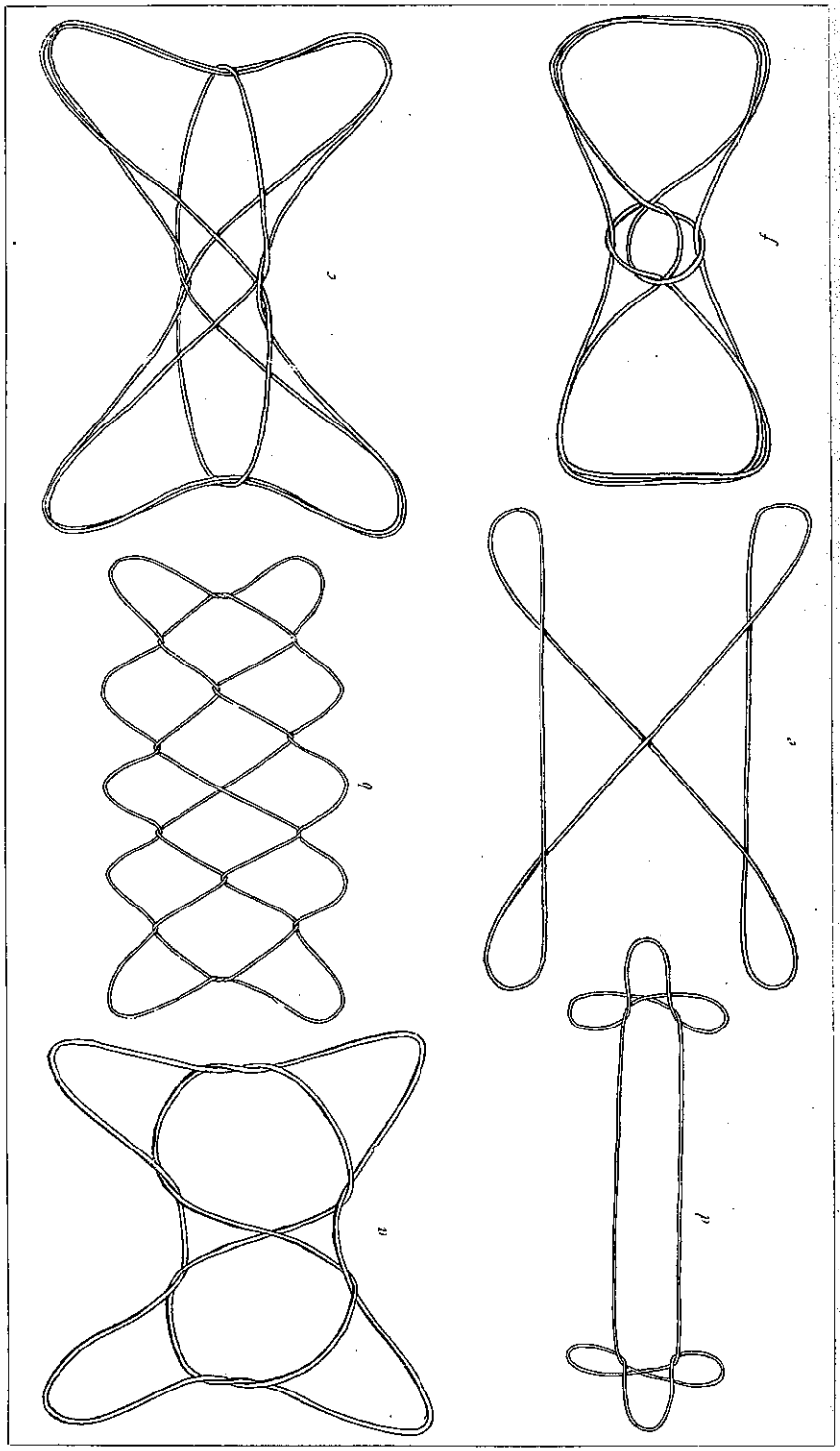
[2] Op. cit., p. 341.

50. *Pu-kau-la.*—A trick of twisting a cord around the fingers or tying it around the arm or leg in such manner that, while seemingly secure, it comes off with a slight pull. The name is from *pu*, and *kau-la*, a rope. *Pu* or *puu* among other meanings is explained by Andrews as "to cast or draw lots (a Hawaiian custom formerly in practice) by using a knotted string." This is a common amusement in Japan, but my Japanese acquaintances have no particular name for it. Dr Bolton tells me that in Austria-Hungary a similar trick is played by *Bauern Fänger* and is called *Kettelziehen.*

51. *Lu-pe:* KITES.—Kites are made of kapa cloth with sticks (*la-au lu-pe*) of *wi-li-wi-li* wood. Six forms were described by my informants: *lu-pe ma-nu*, or "bird kite"; *lu-pe hui-na-ha*, or "four-sided kite"; *lu-pe le-le; lu-pe ho-ku*, "star kite"; *lu-pe ma-hi-ni*, "moon kite"; and *lu-pe ka-na-pi*, "centipede kite." These are illustrated in plate XVI.

The first has a bow of bamboo and two sticks crossed at right angles; the triangles above and below the bow are bound with cord (*kau-la ku-i-na*); tails (*hu-e-lo, we-lo-we-lo*) are fastened at the sides, but none at the extremity. The four-sided kite has two crossed sticks with two binding sticks and is lashed with cord about the edges; it has a long tail with strips of kapa attached, called *kai-kai-a-po-la.* The *lu-pe le-le* (plate XVI, *c*) has a similar long tail. The *lu-pe ho-ku*, or "star kite" (figure *d*) has four sticks crossed in the middle, the edge being formed by a cord tied with a radial cord between each of the sticks. The *lu-pe ma-hi-ni*, or "moon kite" (figure *e*), has three sticks, a long vertical one, crossed by two parallel horizontal sticks, and an exterior hoop of bamboo. Both star and moon kites have tails (*kai-kai-a-po-la*).

The kite strings (*a-ho*) are made of kapa. Men fight kites, one man entangling (*hoo-wi-u-wi-u*) his line with another's and endeavoring to bring down his antagonist's kite. They bet on the result. The kite called *lu-pe le-le* is said to be used invariably for this purpose.



Concerning kites in Tahiti, Ellis[1] says: "The boys were very fond of the *uo*, or kite, which they raised to a great height. The Tahitian kite was different in shape from the kites of the English boys. It was made of light native cloth instead of paper, and formed in shape according to the fancy of its owner."

Taylor[2] describes the New Zealand kite under the name of *te kahu*, or *he manu waka-tuku-tuku, he pakau.* "The name *kahu* is that of a bird like the hawk. Their figure is generally a rough imitation of that bird, with its great outspread wings. These kites are frequently made of very large dimensions of *raupo* leaves, a kind of sedge, neatly sewed together, and kept in shape by a slight frame-work."

Dieffenbach[3] says of the New Zealand kite: "Their kite (*manu* or *pakau pakaukau*) is of a triangular form, and is neatly made of the light leaves of a sedge; it is held by a string made of strips of flax tied together, and its ascent is accompanied with some saying or song. It is a sign of peace when it is seen flying near a village."

Rev. William Wyatt Gill[4] says of kite-flying:

"In times of peace this was the great delight of aged men. Kites were usually five feet in length, covered with native cloth, on which were the devices appropriate to their tribe—a sort of heraldry. The tail was twenty fathoms in length, ornamented with a bunch of feathers and abundance of sere *ti* leaves. Parties were got up of not less than ten kite-flyers, the point of honor being that the kite should fly high and be lost to view in the clouds. Songs made for the occasion were chanted meantime. It was no uncommon event for them to sleep on the mountain, after well securing the kites to the trees. Of course the upshot of all this would be a grand feast, in which the victor got the biggest share. So serious was this employment that each kite bore its own name, and tears of joy were shed by these grey-bearded children as they witnessed the successful flight. When desirous at length of putting an end to their sport, if the wind were too strong to allow the

[1] Op. cit., vol. I., p. 228.
[2] Op. cit., p. 172.
[3] Vol. II., p. 31.
[4] *From Darkness to Light in Polynesia*, London, 1894, p. 39.

string to be pulled in, it was customary to fill a little basket with mountain fern or grass and whirl it along the string. The strong trade winds would speedily convey this 'messenger' to the kites, which then slowly descended to the earth. Children's kites were, and still are, extemporized out of the leaves of the gigantic chestnut tree. Sometimes one sees a boy (no longer grandfathers) flying a properly made kite."

Wilkes[1] says of the Kingsmill islanders, that their kites are made of pandanus-leaf, reduced to half its thickness, which renders it lighter than paper, and they are prettily shaped.

Codrington[2] says: "Kites, used in fishing in the Solomon islands and Santa Cruz, are used as toys in the Banks' islands and New Hebrides, though not commonly of late years. They have their season, being made and flown when the gardens are being cleared for planting. The kite is steadied by a long reed tail, and a good one will fly and hover very well. The name is in Banks' islands *rea*, in Lepers' island *mala*, an eagle."

52. *Hoo-lei-po-po:* CUP AND BALL.—A ball (*po-po*) made of rags of kapa is tied by a cord fastened to the middle of a stick about eight feet long, at the end of which a pocket (*pa-ke-ke*) is attached. The stick is grasped by the other end, and the object is to swing the ball and catch it in the pocket. Two or more play. When one misses, the next takes a turn. The maximum count is one hundred. There are two specimens in the Berlin Museum, one with a kapa and the other with a cocoanut ball. Another (plate XII, *f*) is figured in the *Ethnographic Album of the Pacific Islands*, where it is described as consisting of a light wand of twisted leaf-ribs with a loop at the end. Plate XII, *g*, shows a gourd musical instrument (probably a lover's whistle, *i-pu ho-ki-o-ki-o*) attached by a string ornamented with tufts of feathers.

In Captain King's journal of Cook's voyage to the Pacific ocean,[3] he says that young Hawaiian children have a favorite amusement which shows no small degree of dexterity. They

[1] Vol. V, p. 100. [2] Page 342. [3] Vol. III, p. 147.

one by one, with his thumb and forefinger, continuing until he misses. The next then follows, and so on in turn until the beans are all flipped in the hole. The one who puts the last bean in wins the game.

58. *Ki-o-la-o-la.*—A play with small stone balls by one person who keeps three in the air at the same time.

Captain King,[1] speaking of the game with a ball of green leaves, says: "They are not less expert at another game of the same nature, tossing up in the air and catching in their turn a number of these balls; so that we frequently saw little children thus keep in motion five at a time. With this latter play the young people likewise divert themselves at the Friendly islands."

Stair[2] thus speaks of the game in Samoa: "*O fuanga* consisted in throwing up a number of oranges in the air, six, seven, or eight, and the object was to keep the whole number in motion at once as the Chinese jugglers do their balls. *O le teaunga* was also played with a number of oranges, but in this game they were thrown up backwards."

59. *Ki-mo-ki-mo:* JACKSTONES.—Played by two or more persons with a number of small stones (*po-ha-ku*). Each player has his own stone, called *a-li-i*, "chief." The game is practically identical with that played by children in the United States. The stones of all the players are placed on the ground; one begins by tossing his stone up, grabbing the others, tossing them and catching them all together. He continues until he misses. It is employed for gambling purposes. Of this game Ellis[3] says:

"*Timo*, or *timo timo*, was another game [of Tahiti]. The parties sat on the ground, with a heap of stones by their side, held a small round stone in the right hand, which they threw several feet up in the air, and, before it fell, took up one of the stones from the heap, which they held in the right hand till they caught that which they had thrown up, when they threw down the stone they had taken up, tossed the round stone again, and continued taking up a fresh stone every time

[1] Vol. III, p. 147. [2] Page 138. [3] Vol. I, p. 227.

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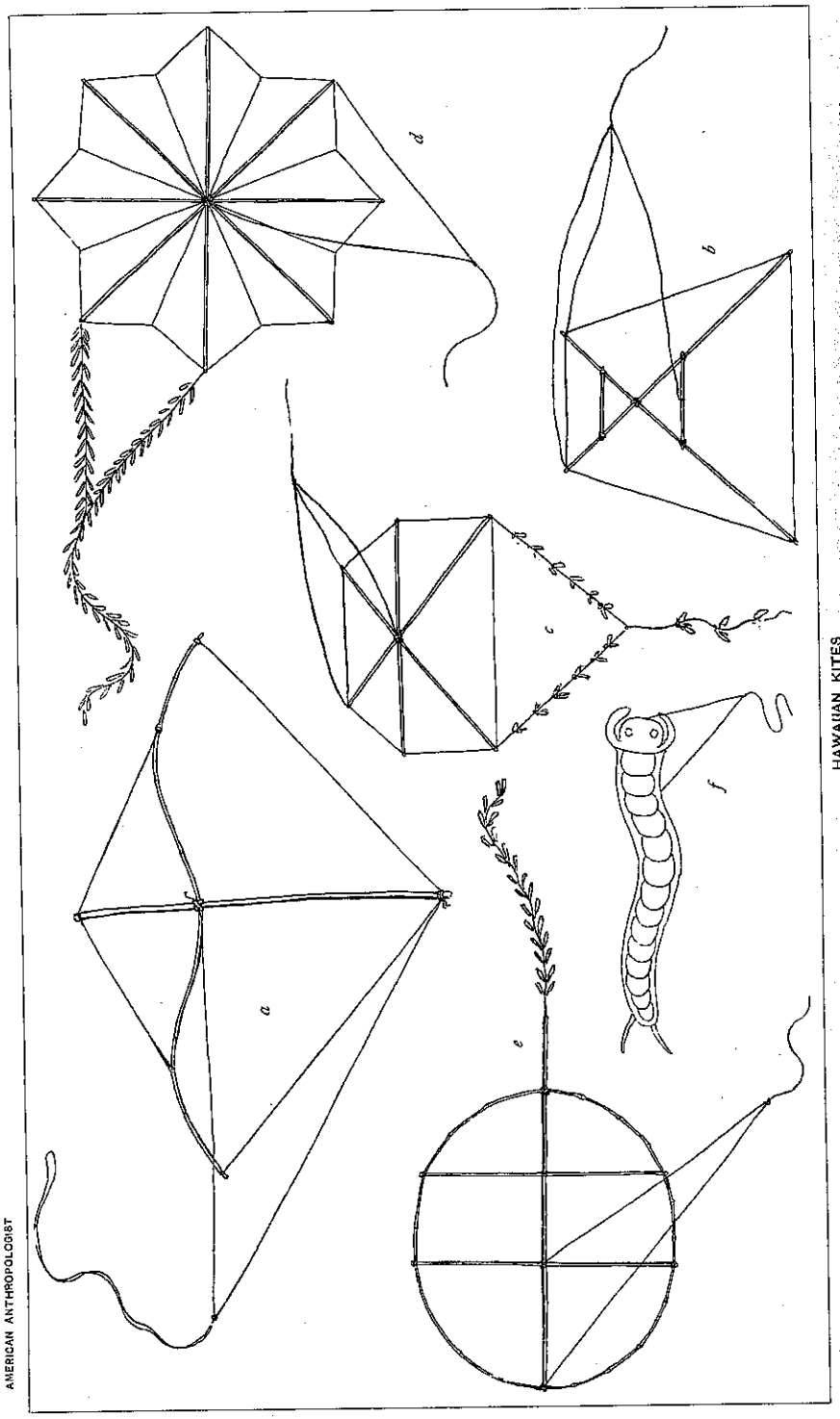

HAWAIIAN KITES

a. Lupe ma-nu—bird kite (No. 21,454, Museum of Archeology, University of Pennsylvania); *b. Lupe hu-ina-ha*—square kite; *c. Lupe lele*; *d. Lupe lo-ku*—star kite; *e. Lupe ma-ka-ni-moku*—moon kite; *f. Lupe ko-na-ki*—centipede kite. The last four are from native drawings.

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they threw the small round one into the air, until the whole heap was removed."

Dieffenbach,[1] speaking of New Zealand, says: "Another game is called *tutukai*, and is played with a number of pebbles."

Of the game in Samoa, Wilkes[2] says: "*Lafo litupa* is played by two persons, who place about 50 beans of the *Mimosa scandium* before them; then taking up four at a time, they throw them up in the air, and catch them on the back of the hand; the player who catches 100 soonest is the winner."

Williams[3] describes the *lavo* of the Fijians, "a game at pitching the fruit of the *walai* (*Mimosa scandens*). The fruit is flat and circular, and from its resemblance in form to money, money is also called *ai lavo*."

60. *Pi-li-ka-la:* COIN-BETTING.—This name is applied in particular to two games with coins—"pitching pennies" and "heads or tails." The first is played by several men who draw a line and throw at it, the one whose piece comes nearest, winning. In the second, the players select either heads or tails. They toss for position, and the first player throws all the coins up and takes those that fall as he bet. The game is played with Hawaiian nickels or five-cent pieces. *Ka-la* is the Hawaiian for "dollar"; hence silver, silver coin generally, Andrews gives the general name for gambling and betting as *pi-li-wai-wai*, and says that the ancient forms were almost innumerable. *Wai-wai* means "goods," "property."

61. *Pa-na-pa-na-hu-a:* "SEED-SHOOTING," MARBLES.—The seeds of the *ka-ka-lai-o-a* plant (*Cæsalpina bonducella*), which are nearly spherical, are used as marbles. Any number play, and each puts the same number into a ring on the ground 10 to 12 feet in diameter. They shoot in turn from the edge of the ring, endeavoring to knock the marbles out. When a player knocks one out he may place his taw or shooter (*ki-ni*) in the ring. If a succeeding player who has not knocked a marble chances to

[1] Vol. II, p. 32. [2] Vol. II, p. 136. [3] Page 127.

hit this shooter he goes out of the game; but if he has knocked a marble out, the one whose shooter is hit forfeits the entire number first put into the ring. The shooters, larger seeds, are valued at five of the ordinary ones which are called *hu-a ma-pa-la* or *hu-a ki-ni-ki-ni*, *hu-a* meaning seed. The game is said to be called also *le-na pa-ka* (*le-na*, "to shoot; *pa-ka*, "to fight").

Dr Edward Palmer collected for our National Museum the seeds of the *Cæsalpina bonducella* in Florida, where, he reports, they are used by children as marbles under the name of "nicker" seeds.

62. *Ki-o-la-o-la-la-au:* "STICK-CASTING," TIP CAT.—Tip cat is played with two sticks made of *ko-a* wood, one about 6 inches in length (*la-au po-ko-le*, "short stick") placed so that its ends rest on the edges of a small hole scooped in the ground, and the other the bat (*la-au hi-li*, "striking stick," or *la-au lo-i-hi*, "long stick"), which is longer. The cat is tossed by thrusting the bat beneath it and striking it in the air. The distance it falls is measured with the bat, and the one who thus first counts one hundred wins the game. The game is also called *pa-a-ni la-au*, from *pa-a-ni*, "to play," and *la-au*, "wood."

Stair[1] refers to "the English schoolboy's game of cat, but played in the water instead of on the land," as among the games of the Samoans.

63. *Ki-no-a:* HOP-SCOTCH.—A diagram is drawn upon the

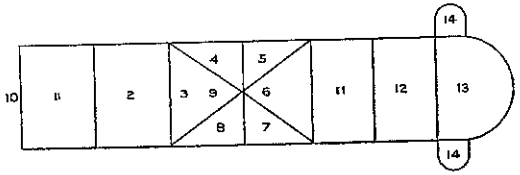

FIG. 6.—Diagram for *ki-no-a*, hop-scotch.

ground as shown in figure 6. The players hop on one foot and kick a flat stone into the several divisions in the order indicated

[1] Page 139.

by the numerals. The end (13) is called *la-ni*, "sky" or "heaven," or *pa-hu*. The divisions on each side are called *pe-pei-ao*, "ear."

64. *He-lu-pa-ka-hi:* "ONE-BY-ONE-COUNTING."—Two persons simultaneously put out their fingers and count, first one finger, crying "one;" then two, crying "two," and so on up to ten, repeating ten times. The game is played very rapidly, and if a player makes an error he loses, otherwise the one first completing the count wins. This game is also called *ku-la li-ma*, from *ku-la*, "school," and *li-ma*, "finger," from its being used, presumably, as a school exercise. It is not the same as the Chinese game of *ch'ái múi*, or the Italian *morra*.

Of the Samoan game Stair[1] says: "*O le talinga matua*, also called *O le lupein ga*, was a game of counting, played by two persons sitting opposite each other. One of them held up his closed hand to his companion, and immediately after showed a certain number of fingers, quickly striking the back of his hand upon the mat, directly after. His companion was required to hold up a corresponding number of fingers immediately after, in default of which he lost a point in the game."

J. S. Polack[2] says of the game in New Zealand: "The game of *Ti* is much indulged in. It consists of a party counting in unison with the fingers; on a number being given, the players must instantly touch the finger denoting the said number, and an error in this active performance is productive of much mortification to the native; the dexterity with which it is played can only be accomplished by continual practice."

65. *Pi-li-li-ma:* "HAND-BETTING."—Two players simultaneously extend their closed hands containing marbles, money, or similar small objects, at the same time crying a number. The one who guesses the sum of the objects wins them all.

66. *Pee-pee-a-ku-a:* "GHOST-HIDING," HIDE-AND-SEEK.—The one who is "it," called *a-ku-a*, "ghost" or "god," is determined

[1] Page 138.

[2] *Manners and Customs of the New Zealanders*, London, 1840, vol. II, p. 171.

by counting out. Andrews gives *hau-pee-pee* as the name of the game. In Japan it is called *oni gokko*, "devil playing." Hide-and-seek is referred to by Stair[1] among the amusements of the Samoans, and by Williams[2] as a Fijian game. Taylor[3] mentions hide-and-seek in New Zealand under the name of *he waka pupuni* or *piri*. Codrington[4] says: "In the Banks' island boys play at hide-and-seek, *rur quona quona;* there are two sides, and if the boy who is hiding is not found by the seekers, he suddenly jumps up and counts a pig against them."

67. *He-lu-pa-a-ni:* "PLAY-COUNTING," COUNTING-OUT.—The following counting-out rhymes were related:

Mo-ke mo-ke a-la pi-a
How many *mo-ke a-la pi-a?*
One, two, three, four, *au-ka hi-a.*[5]

Ki-li ki-li ka.

A-ka-hi ou o-i ha
Pa-e-le pa-ki-ni
I-kau-a le-hei pa
Mai no a-la-ea
Mo-no-na ka-pe-le-na
Ka-i-o-le wi-lu.[6]

68. *Pla-pi-o:* "PRISONER-PLAY," TAG.—The one who is "it" (*a-ku-a*) is determined by counting out. He chases the others, and the one first tagged becomes *a-ku-a* in turn. *Plaa* is the English word "play," Hawaiian *pa-a-ni.*

69. *Ho-lo-pee-a-na-lo.*—A game of hiding played by a number of boys. When all are ready one of the boys pounds on the back of the *a-ku-a*, singing the following song while the others hide:

Ku-i-ku-i ka-mu-mu-mu
Ho-lo i-u-ka ho-lo-kai.

[1] Page 139. [2] Page 127. [3] Page 174. [4] Page 340.

[5] Probably a variant of "Monkey, monkey, bottle of beer, | How many monkeys are there here? | One, two, three, | Out goes he!"—a counting-out rhyme reported by Dr H. Carrington Bolton (*The Counting-out Rhymes of Children*, New York, 1888, p. 116) from many parts of the United States.

[6] Similar to a counting-out rhyme from Hawaii given by Dr Bolton, op. cit., appendix.

70. *Po-ai-pu-ni:* BLIND-MAN'S-BUFF.—Children clasp hands in a ring, within which one stands blindfolded. The children dance around, and as they dance the *ma-ka-po* or "blind-man" catches one and then tries to guess who it is. Ellis[1] says that in Tahiti *tupaurupauru*, a kind of blind-man's-buff, was a favorite juvenile pastime, and Williams[2] mentions blind-man's-buff in Fiji.

71. *Pa-a-ni a-lu a-lu:* PRISONER'S BASE.—A number of boys play, half on a side, each with its base (*pa-hu*). A boy will run out from either side, and those opposite will try to catch him and bring him to their goal. Stair[3] mentions a game played in Samoa by a given number of young men who chose sides, the game appearing to resemble the English game of prisoner's base. J. Stanley Gardiner[4] says that in Rotuma "on moonlight nights the beach is alive with the girls and the boys, singing and playing all sorts of games. A favorite one of these is a sort of 'prisoner's base'; a kind of base is marked off, and then one side hides, while the other side searches for them; they have, if possible, to get back within this base."

72. *Pa-na-i-o-le:* "MICE-SHOOTING."—Shooting mice with bows and arrows, according to Alexander,[5] was engaged in only by chiefs, and connected with religious ceremonies. The bow was never used in war, but only for the above purpose. The deified bones of the chiefs were generally carefully concealed in the most secret and inaccessible caves to prevent their being made into arrows to shoot mice with, or into fish-hooks.

73. *Mo-ko-mo-ko.*—A national sport, practiced on holidays when village champions are opposed to each other. The contestants stand a certain distance apart and throw in succession seven spears, seven stones, seven stone axes with handles, and seven wooden knives, one at the other and then back again. If a player is hit he loses. The game is hazardous and exciting.

[1] Page 228. [2] Page 127. [3] Page 136.

[4] *Journal Anthropological Institute*, vol. XXVII, p. 488.

[5] Vol. I, 91.

Mo-ko-mo-ko is defined by Andrews as "to box; to fence; to fight; to hold boxing matches as pastimes or games."

In New Zealand, Taylor[1] says, *te para mako* consisted in throwing sharp-pointed sticks at each other, and skilfully warding them off by turning the body away when they saw the dart coming. Sometimes an unskilful person lost his life in playing this game.

Codrington[2] says: "In the Solomon islands the great game is throwing and dodging spears, or sticks instead of spears. This is to some extent represented in the Banks' islands by two parties throwing native oranges at each other."

74. *Ke-a-pu-a:* "ARROW-THROWING."—Arrows or darts, consisting of the blossom end of the sugar-cane, are thrown in the following manner: A cord is wrapped around the middle of a cane arrow, the other end being fastened to a stick about four feet long (*la-au-ke-a pu-a*), which is held vertically at right angles to the arrow, which rests on the ground. The latter is then hurled in the air by the stick, the wrapped cord giving it a rotary motion. Four persons play, boys against boys or girls against girls, or two boys against two girls. The one whose arrow goes farthest, wins. It was formerly a man's game. It would appear from Andrews that the fore-end of the *pu-a* was tied with string to prevent splitting. The arrows are also called *pa-pu-a*, from *pa*, "to throw," and *pu-a*, "cane arrow."

Ellis[3] says that in Tahiti a game called *aperea* prevailed. It consisted in jerking a reed, 2½ or 3 feet in length, along the ground. The men seldom played at it, but it was a common diversion of women and children.

Speaking of the amusements of the Samoans, Stair[4] says: "*O le tāngāti'a* was played by many persons at once, each one endeavoring to propel a small light rod of the *fu'a fu'a*, from which the bark had been peeled off as far as possible. The forefinger

[1] Page 173.
[2] Page 341.
[3] Vol. I, p. 227.
[4] Page 138.

was placed upon the head of the stick, when it was thrown down and caused to glide over the ground to a distance of 30 or 40 yards or more."

Wilkes[1] describes *litia* as a general sport of the Samoans, sometimes whole villages playing against each other. Two parties furnish themselves with light sticks of the *Hisbiscus tiliaceus*, about 8 or 10 feet long and as thick as a finger; the bark is stripped off, making them very light. The two parties arrange themselves in a line, and strive to throw these sticks as far as possible; the party who succeeds in throwing fifty the farthest wins the game. The usual distance to which they throw is about 40 yards, and one would conceive it almost impossible for them to be thrown so far. A grand feast usually terminates the sport, the expense of which is borne by the losing party.

Williams[2] describes an athletic sport in Fiji under the name of *tiqa*, or *ulu-toa*. This game is played by throwing from the forefinger a reed 3 or 4 feet long armed with a 6-inch oval point of heavy wood. The weapon is made to skim along the ground to a distance of 100 yards or more. Nearly every village has near it a long level space kept clear of grass for the practice of this favorite exercise.

J. Stanley Gardiner[3] says that in Rotuma "the Fijian game of *tiqa*, or *ulutoa*, used to be very popular; it is now only played by the boys. Properly it seems to be a Fijian game, and was doubtless introduced from there. It is played by throwing from the forefinger, covered with a piece of cloth, a reed about 4 feet long, armed with a pointed piece of hard and heavy wood, 3 to 6 inches long. It is thrown along the ground, bouncing over it, the winner being he who can throw it furthest."

Taylor[4] describes *heteka*, or *neti*, as a game played in New Zealand with fern stalks, which are darted to see who can throw them the farthest.

[1] Vol. II, p. 136.
[2] Page 128.
[3] *Journal Anthropological Institute*, vol. XXVII, p. 487.
[4] Page 173.

Codrington[1] says:

"A game which belongs to Banks' Island and New Hebrides is *tika*, the Fiji *tiqa*, played with reeds dashed in such a manner upon the ground that they rise in the air and fly to a considerable distance. In some islands, as Santa Maria, a string is used to give impetus, and in some the reed is thrown also from the foot. The game is played by two parties who count pigs for the furthest casts, the number of pigs counted as gained depending on the number of knots in the winning *tika*. There is a proper season for the game, that in which the yams are dug, the reeds on which the yam vines had been trained having apparently served originally for the *tika*. It is remarkable that in Mota a decimal set of numerals is used in this game, distinct from the quinary set used on every other occasion of counting."

75. *Pa-hee*.—According to Ellis[2] this is—

"a favorite amusement with farmers, and common people in general. The *pa-hee* is a blunt kind of dart, varying in length from two to five feet, and thickest about six inches from the point, after which it tapers gradually to the other end. These darts are made with much ingenuity, of a heavy wood. They are highly polished, and thrown with great force or exactness along the level ground, previously prepared for the game. Sometimes the excellence of the play consists in the dexterity with which the *pa-hee* is thrown. On these occasions two darts are laid down at a certain distance, three or four inches apart, and he who, in a given number of times, throws his dart most frequently between these two, without striking either of them, wins the game. At other times it is a mere trial of strength; and those win, who, in a certain number of times, throw their darts farthest. A mark is made in the ground, to designate the spot from which they are to throw it. The players, balancing the *pa-hee* in their right hand, retreat a few yards from this spot, and then springing forward to the mark, dart it along the ground with great velocity. The darts remain wherever they stop, till all are thrown, when the whole party runs to the other end of the floor, to see whose have been the most successful throws. This latter game is very laborious."

Brigham[3] states that the *pa-hee* could be and was used as a weapon (see plate XII, *a*). The material was always *kau-i-la* or

[1] Page 340.
[2] Vol. IV, p. 197.
[3] *Preliminary Catalogue*, part II, p. 59.

u-hi-u-hi wood. Each contestant had ten trials. The same *ka-hu-a*, or course, was also used for *mai-ka* (number 78).

76. *Mo-a*.—This is a game played with a *mo-a*, a club similar to the *pa-hee*, but shorter. In either game there was no exact rule for weight or length of stick, but each player suited his own want. It is described as a prominent means of gambling.

77. *Ka-hu-a-ko-i*.—This is described by Andrews as "a species of pastime on the *ka-hu-a* with the *ko-i*." *Ko-i*, among other things, means a small hatchet. The game appears to be similar to *pa-hee* and *mo-a*. Andrews gives *ko-i* as "the name of a play; a sort of race in sliding."

78. *Mai-ka*.—Described by Brigham[1] as a game played with the *u-lu* or *o-lo-hu*. The first name was current on Hawaii and Kauai, and the latter was known on Maui and Oahu. A smooth alley, or *ka-hu-a*, was required and three forms of the game were common. The first was a trial of strength, or throwing, or rather bowling, to the greatest distance; the second required more skill to drive the *u-lu* between two sticks near the end of the *ka-hu-a*; the third was rather a trial of the *u-lu* than of the players, as they were rolled against each other and the toughest won the game for its owner. There is a famous *ka-hu-a* near Kalae on Molokai, where may be seen hundreds of broken *u-lu*. The players trained carefully and developed great strength. Various kinds of stone were used, but a heavy compact coral rock was the favorite; the *u-lu* was sometimes spherical, but usually a thin cylinder with slightly convex ends (plate XII, *b*). The largest *u-lu* of the first form in the Bishop Museum has a diameter of $7\frac{1}{2}$ inches and weighs 22 pounds. Of the second and more common form the largest is 5 inches in diameter, 3 inches thick, and weighs 44 ounces. The smallest has a diameter of $1\frac{7}{8}$ inches and weighs $3\frac{1}{2}$ ounces. Rough and unfinished *u-lu* were used by children for practice. The average weight was a little over a pound. Choice ones were carefully oiled and kept in kapa. The *u-lu* exhibited in the Bishop Museum

[1] *Preliminary Catalogue*, part II, p. 56.

are made of lava, coral, breccia, conglomerate, limestone, and olivine, and there is one of wood.

Ellis[1] says that the game of *mai-ka* is played upon the same floor as *pa-hee*. Two sticks are stuck in the ground only a few inches apart, at a distance of 30 or 40 yards, and between these, but without striking either, the parties at play strive to throw their stone. At other times the only contention is, who can bowl it farthest along the *ka-hu-a*, or floor. The people are, if possible, more fond of this game than of the *pa-hee*; and the inhabitants of a district not infrequently challenge the people of the whole island, or the natives of one island those of all the others, to bring a man who shall try his skill with some favorite player of their own district or island. On such occasions we have seen seven or eight thousand chiefs and people, men and women, assembled to witness the sport, which, as well as the *pa-hee*, is often continued for hours together.

Andrews gives *ne-we-ne-we-we* as "the exclamations of people when they play at *mai-ka*, while the stone is rolling and they cheer it on." Also *hu-i-pa*, *i-ki-ma-ku-a*, and *ka-la-ma-u-la* as names of species of stone out of which *mai-ka* are made. Andrews also states that since the introduction of bowling alleys *u-lu-mai-ka* has been applied to the game of bowls. My informants say the old game has disappeared, and that they apply the name to the game of bowls with pins.

79. *Ki-lu.*—A play with a small gourd, which was unknown to my native informants. A specimen in the British Museum (plate XII, *c*) is figured in the *Ethnographic Album of the Pacific Islands*, where it is described as a top played at night in a lascivious game. It is spun through the air at a specific object, the forfeit being at the expense of the woman.

Alexander states that the game of *ki-lu* (and *u-me*) was always played at night, in an inclosure made for the purpose, and was connected with many vile associations. The *ki-lu* itself was a

[1] Vol. IV, p. 198.

small gourd of peculiar shape, which was thrown at a stick set up at a distance.

Andrews gives *lo-ha* as a kind of sport in former times, the same as *ki-lu;* also *he-lu-ai* as the office of a person engaged in the play of *ki-lu*, and *hau-na* as the striking of the hand or other substance in playing the *ki-lu*.

80. *Ki-o-la-o-la-le-na:* "RING-CASTING."—A game of casting iron rings over a small stake or pin. The rings are about an inch in interior diameter. Four men play, each with ten rings. The one who puts the most rings on the pin wins the prize. On the birthday of King Kamehameha I, rings made of sections of cocoa-nut shell (*le-na-ni-u*), wrapped with kapa to prevent their breaking, are used in a similar game, in accordance with old custom. My informants state that stone rings also were anciently used.

81. *Pu-he-ne-he-ne.*—A game in which a stone called a *no-a* was concealed in one of five places (*puu*) under a kapa, the object being to guess under which it was hidden.

Ellis[1] describes it as one of the most popular games of the Hawaiian islands, the favorite amusement of the king and higher order of chiefs, and frequently occupied them whole days together. Those who play sit cross-legged on mats spread on the ground, each holding in his right hand a small elastic rod, *ma-i-le*, about three feet long and highly polished (plate XII, *h*). At the small end of this stick is a narrow slit or hole, through which a piece of dogskin, with a tuft of shaggy hair on it, or a piece of *ti* leaf, is usually drawn. Five pieces of kapa of different colors, each loosely folded up like a bundle, are then placed between the two parties, which generally consist of five persons each. One person is then selected on each side to hide the stone. He who is first to hide it, takes it in his right hand, lifts up the cloth at one end, puts his arm under as far as his elbow, and passing it along several times underneath the five pieces of cloth, which lie in a line contiguous to each other, he finally leaves it under one

[1] Vol. IV, p. 81.

of them. The other party sit opposite, watching closely the action in the muscles of the upper part of his arm; and it is said that adepts can discover the place where the stone is deposited, by observing the change that takes place in those muscles, when the hand ceases to grasp it. Having deposited the stone, the hider withdraws his arm, and with many gestures, separates the contiguous pieces of cloth into five distinct heaps, leaving a narrow space between each. The opposite party, having keenly observed this process, now point with their wands or sticks to the different heaps under which they suppose the stone lies, looking significantly at the same time, full in the face of the man who hid it. He sits all the while, holding his fingers before his eyes to prevent their noticing any change in his countenance, should one of them point to the heap under which it is hidden. Having previously agreed who shall strike first, that individual, looking earnestly at the hider, lifts his rod and strikes a sharp blow across the heap he has selected. The cloth is instantly lifted, and should the stone appear under it, his party have won that hiding with one stroke; if it is not there, the others strike till the stone is found. The same party hide the stone successively, according to their agreement at the commencement of the play; and whichever party discovers it the given number of times, with fewest strokes, wins the game. Sometimes they reverse it; and those win who, in a given number of times, strike the most heaps without uncovering the stone. Occasionally they play for amusement only, but more frequently for money or other articles of value which they stake on the game.

The five *puu* receive the following names: (1) *ki-hi* or *ki-hi-mo-e*, (2) *pi-li* or *pi-li-mo-e*, (3) *kau*, (4) *pi-li-pu-ka*, (5) *ki-hi-pu-ka*. These are regarded as corresponding to the following divisions of the night: (1) sunset (?), (2) 9 oclock in the evening, (3) midnight, (4) 3 oclock in the morning, (5) sunrise (?).

Andrews gives *pu-pu-he-ne*, a row of men in a certain game, presumably *pu-he-ne-he-ne*. He also defines *pe-le*, not only as the name

of a volcano and of the fabled goddess of volcanoes, but also: "4, a stone from a volcano used in the play called *pu-he-ne-he-ne*. See *no-a*."

In Captain King's journal of Cook's voyage to the Pacific ocean,[1] he says: "They have another game which consists in hiding a stone under a piece of cloth, which one of the party spreads out, and rumples in such a manner that the place where the stone lies is difficult to be distinguished. The antagonist, with a stick, then strikes the part of the cloth where he imagines the stone to be; and, as the chances are, upon the whole, considerably against his hitting it, odds of all degrees, varying with the opinion of the skill of the parties, are laid on the side of him who hides." Elsewhere he says: "We observed great numbers of small polished rods, about four or five feet long, somewhat thicker than the rammer of a musket, with a tuft of white dog's hair fixed on the small end. These are, probably, used in their diversions."

Corney[2] says: "They play another game by hiding a stone under three pieces of cloth. Six people play at this game, each party having his stone and cloths and a small wand with which they strike the cloth under which they think the stone is deposited. If they do not guess right the first time, the stone is shifted and so on alternately. I have seen the chiefs sit for a whole day before they decide the game."

A *no-a* in the Bishop Museum (Cat. number 881) is described as the stone of Kalanikupele, the last king of Oahu, who had a large house at Waimanalo where he played this and other games.

My informants stated that this game is not played now in Honolulu, but that they had seen it played by men from Kauai.

J. Stanley Gardiner[3] says that in Rotuma "another favorite amusement on the beach is to make a bank of sand, and out of this to scrape a number of holes in the sand. A piece of coral is then taken in the hand and, while these are filled up, hid in one.

[1] Vol. III, p. 145.
[2] Page 106.
[3] *Journal Anthropological Institute*, vol. XXVII, p. 488.

When they are tired with the rougher games above, the whole beach may be seen strewn with young people, five or six together, playing this game. The unsuccessful in guessing, in which hole the coral has been placed, will be set on by the others, and covered in sand."

82. *Ko-ho-ko-ho-pu-ni-u:* COCOANUT-SHELL GUESSING.—A button of cocoanut-shell (*pi-hi-ni-u*) is concealed under one of two cups of cocoanut-shell, the object being to guess under which it is hidden.

83. *Hu-na po-ha-ku:* STONE-HIDING.—A number of players stand in a row with their closed hands outstretched, and another endeavors to guess in which hand a stone (*po-ha-ku-maa*, "sling stone") is concealed, slapping the hand he selects. If he guesses correctly, the one who had the stone takes his place.

Taylor[1] describes the following game in New Zealand: "*Tutu kai.*—A circle being formed, one takes a little stone, or anything else, in his hand, and then another repeats a verse. A person then goes around the circle, and guesses in whose hand it is hid, each having his fist closed; if he is right, the person who has the stone, takes his place, and goes round; if he is wrong, he continues until he discovers where it is hid."

84. *Lu-lu.*—Four disks of volcanic stone about an inch in diameter and marked on one side (figure 7) are shaken in both hands and allowed to fall at random on the ground. These dice

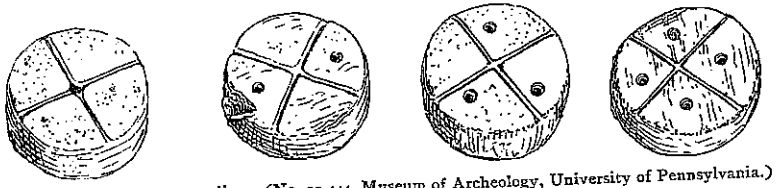

FIG. 7—*U-lu lu-lu*,—stone dice. (No. 21,444, Museum of Archeology, University of Pennsylvania.)

are marked with a cross as shown in the figure, one with a central dot and the others with two, three, and four dots. The dots and crosses are painted red. Any number play, and each player has

[1] Page 174.

two throws, or rather, if any stone comes unmarked side up, he throws it again. The spots count and the highest throw in a round wins; or the game may be played to a fixed number, as one hundred. If a player throws all marked faces up, it counts ten and he has another throw. The dice are called *u-lu*, the same as the stones used in *mai-ka*. *Lu-lu* means to shake. The throws are called as follows:

Hu-li la-lo, "all down."
Hu-ka-hi hu-li i-lu-na, "one turning up."
E-lu-a hu-li i-lu-na, "two turning up."
E-ko-lu hu-li i-lu-na, "three turning up."
E-ha hu-li i-lu-na, "four turning up."

Ordinary cubical dotted European dice receive the same name of *u-lu* or *u-lu lu-lu;* and dice throwing is called *lu-lu*, Three are commonly employed.

85. *Ko-na-ne.*—According to Brigham,[1] a game "played on a flat surface of stone or wood, and somewhat resembling 'fox and geese' or Japanese gobang (*go*). Positions on the *pa-pa-mu* were marked by a slight depression on stone and often by the insertion of bone, usually chicken (sometimes human), in wood. There seems no definite number of places or arrangement. Beach-worn pebbles—coral for white, lava for black—completed the equipment." Two boards in the Bishop Museum (plates XI, *e*, and XII, *i*) are stated to have 180 and 83 places, respectively.

In his journal of Cook's voyage to the Pacific ocean[2] Captain King says: "They have a game very much like our draughts; but, if one may judge from the number of squares, it is much more intricate. The board is about two feet long and is divided into 238 squares, of which there are 14 in a row, and they make use of black and white pebbles, which they move from square to square."

Corney[3] says: "Their national game is draughts, but instead of having twelve men each, they have about forty; the board is

[1] *Preliminary Catalogue*, part II, p. 60.
[2] Vol. III, p. 144.
[3] Page 106.

painted in squares, with black and white stones for men, and the game is decided by one party losing all his pieces."

Andrews defines *ko-na-ne* as a game like checkers, a species of *pu-ni-pe-ke*. The stones are placed on squares, black and white; then one removes one and the other jumps, as in checkers. He gives *pa-pa-mu* as the name of the board on which *ko-na-ne* is played, and *i-li-i-li* as pebbles, small stones, used in playing *ko-na-ne*. Also *hi-u* as the name of the counter, and also to move the *hi-u* in playing *ko-na-ne*. *Hi-u-hi-u* is "to practice sorcery" and also "to play *ko-na-ne*." *Pa-hi-u-hi-u* is the "name of a game like *ko-na-ne*," and "to move by jumping as one does in playing *ko-na-ne*." *Lu-na* is the chief piece in the game *ko-na-ne*.

86. *Moo:* DRAUGHTS.—Played on a board or diagram (*pa-pa ko-na-ne*) of 8 by 8 squares (plate XI, *d*) cut on a flat stone, the alternate squares on which the pieces are placed being marked with crossed diagonal lines. The men (*i-li-i-li*), twelve on each side, consist of red pebbles (*i-li-i-li u-la*) and black pebbles (*i-li-i-li e-le-e-le*), which are placed on the marked squares. The play is identical with our game of draughts, except that a king (*a-li-i*, "chief") can move or jump any number of squares, like the queen in chess. There are little holes, *lu-a*, in the center of the marked squares to hold the stones. A king, or *a-li-i*, is made by putting two stones in the hole. The squares are called *ha-le*, "houses."

The game above described, which was communicated to me by the four natives, is not mentioned by the name of *moo* in Andrews' *Dictionary*. It exactly agrees in the king's move[1] with the game of *dama* or draughts played in the Philippine islands, differing in the men being placed within the squares instead of at the intersection of the lines.

87. *Ma-nu:* FOX AND GEESE.—Played on a diagram cut on a stone, consisting of four rectangles placed around a square to form a

[1] The same as in Polish draughts. Speaking of New Zealand, Tregear says: "Draughts, *mu*, some think an introduced game, but I think it can well be proved to be ancient."

cross, the squares all being crossed with intersecting lines. Thirteen stones (*pa-ka*) are arranged as shown in plate XI, *b*. One of the two players, called *pu-ni-pe-ki*, points with a stick (*la-au*) to one of the unoccupied points. The stones move one square at a time and endeavor to pen up the *pu-ni-pe-ki*, who in turn tries to capture the stones. The stick moves one square and jumps over an adjacent piece when the next square beyond is vacant. The player then cries, *Pe-pe-hi ka-na-ka!* When the stick is cornered the opponent cries, *Paa!* ("tight").

This is no doubt the game referred to by Andrews under the name of *pu-ni-pe-ki* (*bo-ne-pa-te*, *bu-ni-be-ti*), "a game like 'fox and geese.'" It may be that this is a Hawaiian rendering of "Bonaparte," the object of the game being to pen him up. The name *ma-nu*, "bird," is explained by the moves of the stick. Andrews gives *le-le-pu-ni*, "a kind of play with white and black stones on a board," probably referring to this game.

88. *Hu-ki-la-au:* STICK-DRAWING, DRAWING-STRAWS.—One player prepares two slips of wood of uneven length, and the others draw. If the drawer gets the long piece, he wins; if the short piece, he loses.

89. *Pau-nau-we:* JACKSTRAWS.—Some twenty-five or thirty small splints (*la-au*) are allowed to fall in a heap, and the players endeavor to separate them one by one without moving the others. The name means "to divide into parcels or parts."

90. *Ko-ho-ko-ho-pu-aa:* "PIG-GUESSING."—This is a kind of lottery. The principal stake consists of pigs (*pu-aa*). One hundred cards are prepared, on which are written the names of various articles of food, as pig, fowl, banana, bread-fruit, orange, eggs, etc. Twenty persons each draw a card, the object being to get the one marked "pig." If this is not drawn the first time, the drawing is repeated until some one gets it. This lottery is held on a holiday. The prizes are offered by some rich person. The winner gets five pigs. Afterward the assembled company eats the other food that has been provided.

91. *Pe-pa-ha-kau:* CARDS.—Foreign playing-cards are used. Poker is a favorite game. Five cards are dealt around and the highest hand wins. A player not getting a pair is out of the game. *Pe-pa*, "cards," is the English "paper." *Ha-kau* means "fighting."

LIST OF GAMES

1 *Ko-wa-li*, Jumping-rope.
2 *Le-le-ko-a-li*, Swinging.
3 *Ma-hi-ki*, See-saw.
4 *Ho-lo-li-o*, Horse-riding.
5 *Ku-al-a-poo*, Head-standing.
6 *Pe-le-pe-le*, Boxing.
7 *Ka-ka-pa-hi*, Fencing.
8 *Ku-la-ku-lai*, Wrestling.
9 *U-ma*, Wrist-wrestling.
10 *U-lu-mi i-lo-koo-ke kai*, Wrestling in the sea.
11 *Hu-ki-hu-ki-kau-la*, Rope-pulling.
12 *Hu-ki-hu-ki-a-i*, Neck-pulling.
13 *Hu-ki-hu-ki-li-ma*, Finger-pulling.
14 *Hei-hei-ku-ki-ni*, Foot-racing.
15 *Hei-hei-haa-we*, Burden-racing.
16 *Hei-hei-e-ke*, Sack-racing.
17 *Le-le-wa-wae-ka-hi*, One-foot jumping.
18 *Le-le-le-la-au*, Stick-jumping.
19 *Hei-hei-hu-i-la-ba-la-la*, Wheelbarrow racing.
20 *Hei-hei-au*, Swimming race.
21 *Hei-hei-waa*, Canoe-racing.
22 *Hei-hei-ka-pu*, Tub-racing.
23 *Hei-hei-na-lu*, Surf-racing.
24 *Le-le-ka-wa*, Precipice-jumping.
25 *O-i-li-pu-le-lo.*
26 *Hee-ho-lu-a*, Sledge-sliding.
27 *Ku-ku-lu-a-e-o*, Stilts.
28 *Pai-pai-li-ma*, Hand-clapping.
29 *Ku-hi-ku-hi-ma-ka*, Eye-pointing.
30 *Ku-hi-la-au*, Wood-pointing.
31 *O-lo-lo*, Rubbing.
32 *Hu-i-la-ma-ka-ni.*
33 *O-le-ha.*
34 *Ha-ka mo-a*, Cock-fighting.
35 *Ho-pu-ho-pu-na-lo*, Dragonfly-catching.
36 *Le-le-pi-nau*, Dragonfly-flying.
37 *Au-waa-lau-ki*, Leaf-canoes.
38 *Kii-pe-pe*, Dolls.
39 *Pe-pa pa-a-ni*, Paper play.
40 *Po-ka-kaa*, Buzz.
41 *O-e-o-e*, Bullroarer.
42 *Hu-i-la-ma-ka-ni*, Wind-wheel.
43 *Hu-o-e-o-e*, Humming-tops.
44 *Hu-ko-a*, Wooden tops.
45 *Ha-no*, Squirt-gun.
46 *Hu-a ko-pa*, Soap-bubbles.
47 *Hei*, Cat's-cradle.
48 *Pu-la-au*, Wood-puzzle.
49 *O-ki-kau-la*, String-cutting.
50 *Pu-kau-la.*
51 *Lu-pe*, Kites.
52 *Hoo-lei-po-po*, Cup and ball.
53 *Ku-he-le-mai.*
54 *Nou-nou-pu-ni-u*, Cocoanut-shell-casting.

55 *Ki-ni-ho-lo*, Ball.
56 *Pe-ku-ki-ni-po-po*, Ball-kicking.
57 *Pa-na-pa-na-lu-a*, Pit-shooting.
58 *Ki-o-la-o-la.*
59 *Ki-mo-ki-mo*, Jackstones.
60 *Pi-li-ka-la*, Coin-betting.
61 *Pa-na-pa-na-hu-a*, Seed-shooting.
62 *Ki-o-la-o-la-la-au*, Stick-casting.
63 *Ki-no-a*, Hop-scotch.
64 *He-lu-pa-ka-hi*, One-by-one-counting.
65 *Pi-li-li-ma*, Hand-betting.
66 *Pee-pee-a-ku-a*, Ghost-hiding; Hide-and-seek.
67 *He-lu-pa-a-ni*, Play-counting.
68 *Pla-pi-o*, Prisoner's play.
69 *Ho-lo-pee-a-na-lo.*
70 *Po-ai-pu-ni*, Blind-man's-buff.
71 *Pa-a-ni a-lu a-lu*, Prisoner's base.
72 *Pa-na-i-o-le*, Mice-shooting.
73 *Mo-ko-mo-ko.*
74 *Ke-a-pu-a*, Arrow-throwing.
75 *Pa-hee.*
76 *Mo-a.*
77 *Ka-hu-a-ko-i.*
78 *Mai-ka.*
79 *Ki-lu.*
80 *Ki-o-la-o-la-le-na*, Ring-casting.
81 *Pu-he-ne-he-ne.*
82 *Ko-ho-ko-ho-pu-ni-u*, Cocoanut shell guessing.
83 *Hu-na po-ha-ku*, Stone-hiding.
84 *Lu-lu.*
85 *Ko-na-ne.*
86 *Moo*, Draughts.
87 *Ma-nu*, Fox and geese.
88 *Hu-ki-la-au*, Stick-drawing.
89 *Pau-nau-we*, Jackstraws.
90 *Ko-ho-ko-ho-pu-aa*, Pig-guessing.
91 *Pe-pa-ha-kau*, Cards.